



STAFF REPORT

TO: Board of Directors
THRU: Mark Foree, General Manager
FROM: Scott Estes, Director of Engineering
DATE: May 9, 2016
SUBJECT: **Rate Amendment, Introduction: Introduction and first reading of amendments to TMWA Rate Schedule Water System Facility Charges (WSF) for Charge Area 10**

Recommendation

Staff presents for the Board's consideration and discussion with possible direction to staff the First Reading of proposed amendments to TMWA's Rate Schedule "Water System Facility Charges" (WSF) to modify Charge Area 10 Facility Charges and boundaries. The proposed amendments result in changes to the Storage Facility Unit Cost and elimination of Charge Areas 8A, 13 and 13B since these Areas will be incorporated into the new Area 10.

Proposed amendments are shown in the attached redline copies. The proposed amendments, if adopted after the public hearing for the Second Reading, tentatively scheduled for the Board's June 15, 2016 meeting, are to be effective the start of business on June 16, 2016.

Summary

- WSF charges are paid by new development to reimburse TMWA for the cost of water system improvements that provide capacity to serve growth.
- The new Lemmon Drive 24-inch main integrates the North Valleys Importation Project's 8,000 acre feet of Honey Lake groundwater resources from the Fish Springs Ranch into the North Valleys Areas.
- The Fish Springs resource is the future source of supply for growth in the North Valleys.
- Consistent application of the existing Fish Springs Area Charge is complicated by the location of the new development.
- The existing Stead and Lemmon Valley systems will provide a peaking supply to allow full utilization of the Fish Springs resource, so TMWA should continue to collect facility charges on previous investment in those facilities.

Background

WSF charges are paid by new development to reimburse TMWA for the cost of water system improvements that provide capacity to serve growth. WSF charges do not impact existing customers or customer rates. When the original WSF charges for former Washoe County water utility service areas were approved by the Board in October 2014, it seemed logical to maintain separate facility charge areas for Lemmon Valley and Horizon Hills because the systems were operated separately from the TMWA's North Virginia and Stead-Silver Lake systems. Likewise, the development of the existing Fish Springs charge was based on the new facilities that would be necessary to integrate the resource into the Lemmon Valley system. Since that time staff has analyzed and developed many water facility plans for proposed development in the North Valleys and it has become evident that the Fish Springs resource will be used throughout the area and not just for development in Lemmon Valley.

Discussion

As noted above, the existing Fish Springs Area charge will not accurately reflect the system facilities used to supply the development if the project was located in areas other than Lemmon Valley. Area charges are supposed to reflect the cost of the facilities required to provide the requested service. There are several considerations that resulted in staff's recommendation. First, completion of the North Valleys Integration Project (29,000 feet of 24-inch pipe from Lemmon Drive and Waterash in northern Lemmon Valley to North Virginia Street south of US-395) and interties to that pipeline will allow Fish Springs water to be supplied to all North Valley Areas. Second, at some point in the future (when more than 4,900 acre feet has been committed for new demands) the Fish Springs resource will require a supplemental maximum day peaking supply to support the base level supply. This peak source will come from TMWA's groundwater sources in the North Valleys and/or imported TMWA surface water supplied through the TMWA and Lemmon Valley distribution systems. Third, there are very few Truckee River resources available for commitment in the area and the Lemmon Valley groundwater resources have been committed to existing development. Lastly, by the end of FY 2017, TMWA will have invested over \$23 million in capacity/supply improvements which benefits growth in the Stead-Lemmon Valley area. Therefore, since growth will be served predominantly with Fish Springs' resources regardless of location in the North Valleys, it is logical to establish one Area fee that reflects the integrated systems that will deliver the water and provide the required peaking capacity. The redlined version of Rate Schedule WSF is attached.

As part of the public process associated with proposed changes to TMWA Rate Schedules and Rules, TMWA conducted a public workshop on this subject on May 10, 2016 at 6 p.m. at the TMWA corporate office. TMWA contacted the Builder's Association of Northern Nevada (BANN) to notify them of the workshop and to invite interested parties to attend. The red-line version of Rate Schedule WSF was forwarded to BANN for their review prior to the workshop. The results of the workshop will be reported at the second reading.

Truckee Meadows Water Authority

RATE SCHEDULES

WSF – WATER SYSTEM FACILITY CHARGES

APPLICABILITY

Pursuant to procedures set forth in Rule 5, Applicants for new Service or Modified Service to a Service Property(ies) are subject to Water System Facility (WSF) Charges. WSF Charges are based on the Maximum Day Demand estimated in gallons per minute (GPM) by the Authority to serve the Service Property(ies) multiplied by the following Unit Costs. WSF Charges will be assessed where applicable and as identified in the Water Service Agreement.

A. Area Facility Unit Cost by Charge Area

	<u>Charge Area</u>	<u>Amount</u>	
0	Central Reno	\$0.00	per GPM
1	South Truckee Meadows	\$958.00	per GPM
2	Sparks-East Reno	1,711.00	per GPM
2A	Sparks-Inside McCarran Blvd	856.00	per GPM
3	Northwest Reno – Northgate/Mogul	1,575.00	per GPM
4	Sparks – Pyramid/Spanish Springs	2,877.00	per GPM
5	Sparks – The Vistas	4,555.00	per GPM
6	Sun Valley-Sullivan Pump Zones	1,309.00	per GPM
7	Verdi	TBD	
8	Sierra-North Virginia Pump System	4,1684,142.00	per GPM
8A	Horizon Hills	4,023.00	per GPM
9	Lakeridge-Plumas Pump System	1,838.00	per GPM
10	Stead—Silver Lake— Lemmon <u>Valley</u>	5,6235,057.00	per GPM
11	Southeast Truckee Meadows	2,828.00	per GPM
12	Spanish Springs	5,789.00	per GPM
13	Lemmon Valley	2,734.00	per GPM
13A	Heppner*	1,011.00	per GPM
13B	Fish Springs	4,237.00	per GPM
14	STMGID West/Thomas Creek	655.00	per GPM
15	Arrowcreek/Mt. Rose**	12,568.00	per GPM

Where a Service Property is not located within an established Charge Area described above or where the Area Facility Unit Cost for that Charge Area has not been established, applicable Area Facility Unit Costs shall be determined by Authority on a case by case basis and may include charges for on-site and off-site improvements, including Oversizing Costs, to integrate new Water System Facilities or to connect to, expand, relocate or alter existing water Facilities, determined by the Authority as necessary to facilitate annexation of the Service Property into the Authority's Retail Service Area and/or development of the Charge Area or Charge Area Unit Cost to be established, as set forth in the Annexation Agreement or Water Service Agreement between Applicant and Authority.

* Charge Area 13A is subject to an additional charge of \$5,490.00 per lot for on-site distribution improvements.

** Component of fee includes estimated costs of acquiring supplemental resource supply. Fee may be reduced to \$7,618.00 upon Applicant dedication of an acceptable combination of groundwater and creek water rights to satisfy supplemental conjunctive use supply as determined by the Authority pursuant to its Rule 7.

Added: 06/18/03 Amended: 10/01/03; 01/21/04; 03/01/05; 10/18/06; 03/01/08; 05/21/09; 05/21/10; 06/19/13; 10/15/14; 01/01/15; 05/21/15

Truckee Meadows Water Authority

RATE SCHEDULES

WSF – WATER SYSTEM FACILITY CHARGES

B. Supply and Treatment Facility Unit Cost By Charge Area

“Supply and Treatment Facility Unit Cost” is the unit cost in dollars per GPM of Maximum Day Demand, representing the cost to construct and finance supply/treatment improvements identified in the Authority’s facility plan.

	<u>Charge Area</u>	<u>Amount</u>	
0	Central Reno	\$4,163.00	per GPM
1	South Truckee Meadows	4,163.00	per GPM
2	Sparks-East Reno	4,163.00	per GPM
2A	Sparks-Inside McCarran Blvd	4,163.00	per GPM
3	Northwest Reno – Northgate/Mogul	4,163.00	per GPM
4	Sparks – Pyramid/Spanish Springs	4,163.00	per GPM
5	Sparks – The Vistas	4,163.00	per GPM
6	Sun Valley-Sullivan Pump Zones	4,163.00	per GPM
7	Verdi	TBD	per GPM
8	Sierra-North Virginia Pump System	4,163.00	per GPM
8A	Horizon Hills	4,163.00	per GPM
9	Lakeridge-Plumas Pump System	4,163.00	per GPM
10	Stead—Silver Lake- <u>Lemmon Valley*</u>	4,163.00	per GPM
11	Southeast Truckee Meadows	4,163.00	per GPM
12	Spanish Springs	4,163.00	per GPM
13	Lemmon Valley	0.00	per GPM
13A	Heppner	0.00	per GPM
13B	Fish Springs	0.00	per GPM
14	STMGID West/Thomas Creek	4,163.00	per GPM
15	Arrowcreek/Mt. Rose	0.00	per GPM

* For Area 10 growth dedicating Fish Springs groundwater resources, the Supply-Treatment Facility Unit Cost is 0 (zero).

Truckee Meadows Water Authority

RATE SCHEDULES

WSF – WATER SYSTEM FACILITY CHARGES

C. Storage Facility Unit Cost By Charge Area

“Storage Facility Unit Cost” is the unit cost in dollars per GPM of Maximum Day Demand, representing the cost to construct and finance storage improvements identified in the Authority’s facility plan.

	<u>Charge Area</u>	<u>Amount</u>	
0	Central Reno	\$ <u>933772</u> .00	per GPM
1	South Truckee Meadows	<u>933772</u> .00	per GPM
2	Sparks-East Reno	<u>933772</u> .00	per GPM
2A	Sparks-Inside McCarran Blvd	<u>933772</u> .00	per GPM
3	Northwest Reno – Northgate/Mogul	<u>933772</u> .00	per GPM
4	Sparks – Pyramid/Spanish Springs	<u>933772</u> .00	per GPM
5	Sparks – The Vistas	<u>933772</u> .00	per GPM
6	Sun Valley-Sullivan Pump Zones	<u>933772</u> .00	per GPM
7	Verdi	TBD	per GPM
8	Sierra-North Virginia Pump System	<u>933772</u> .00	per GPM
8A	Horizon Hills	0.00	per GPM
9	Lakeridge-Plumas Pump System	<u>933772</u> .00	per GPM
10	Stead – Silver Lake- <u>Lemmon Valley</u>	<u>9330</u> .00	per GPM
11	Southeast Truckee Meadows	0.00	per GPM
12	Spanish Springs	0.00	per GPM
13	Lemmon Valley	0.00	per GPM
13A	Heppner	0.00	per GPM
13B	Fish Springs	0.00	per GPM
14	STMGID <u>West</u> /Thomas Creek	0.00	per GPM
15	Arrowcreek/Mt. Rose	0.00	per GPM

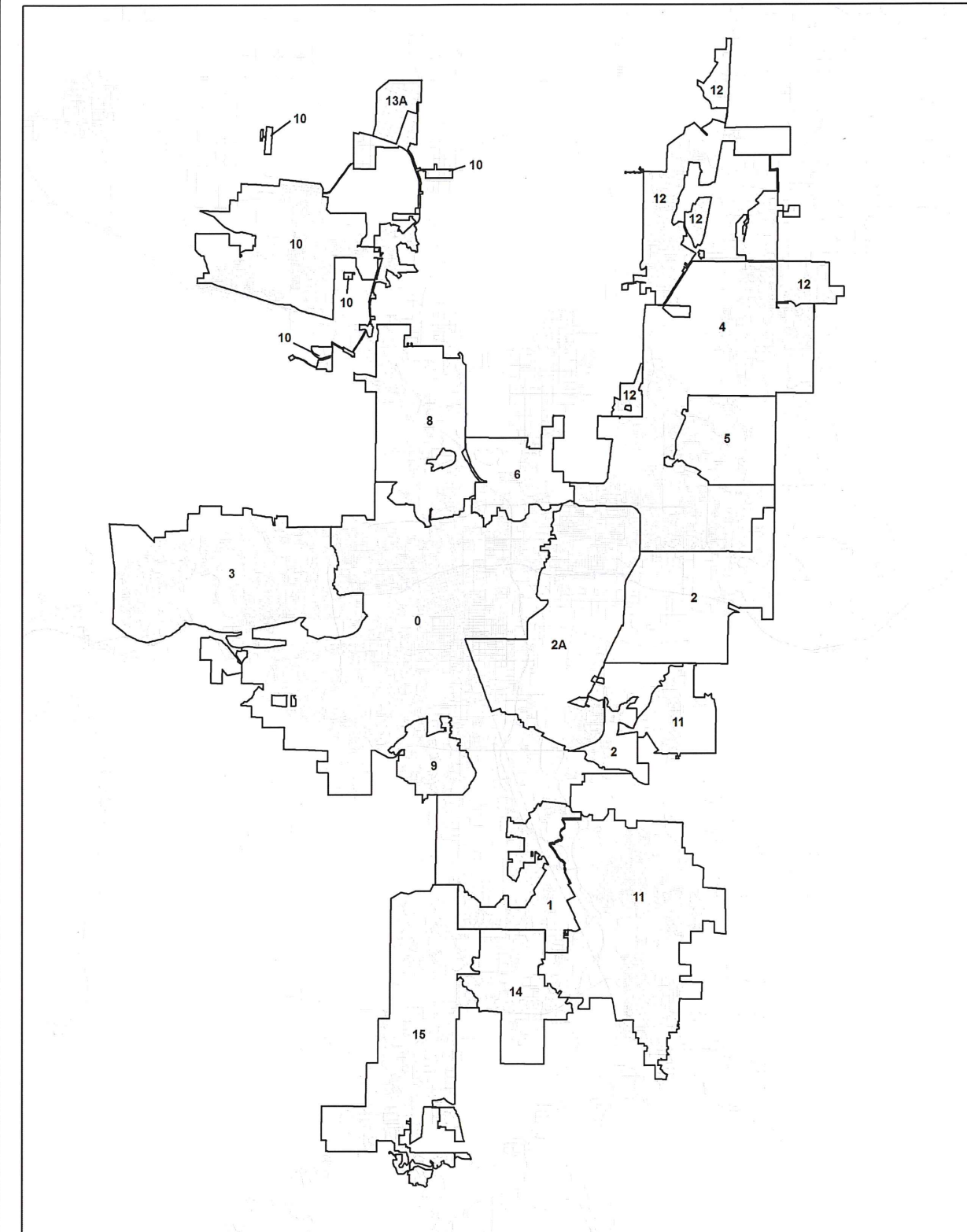
NOTE: The following map depicts only approximate boundaries of the Charge Areas because the Authority’s distribution system undergoes frequent modification, Charge Area boundaries are subject to frequent adjustment and the exact boundaries of the Charge Areas shall be maintained by and may be adjusted from time to time by the General Manager of the Authority. The Authority attempts to keep a current map posted on its website, at www.tmwa.com; however, this map may not show sufficient detail to depict Charge Areas precisely. Pursuant to Rule 5 the Authority will determine the Charge Area and associated Area Facility charges to serve the Applicant’s Service Property(ies) at the time of application based on the most current Charge Area boundary information maintained by the General Manager of the Authority.

Truckee Meadows Water Authority

PROPOSED

RATE SCHEDULES

WSF – WATER SYSTEM FACILITY CHARGES



Added: 01/01/15; 05/21/15

North Valleys Area Facility Charges:

All Fees are \$\$ per Max Day GPM unless noted otherwise

Existing Fees

	<u>Area 8A</u> <u>Horizon Hills³</u>	<u>Area 8</u> <u>No. Virginia</u>	<u>Area 10</u> <u>Stead</u>	<u>Area 13</u> <u>Lem. Valley</u>	<u>Area 13A</u> <u>Heppner¹</u>	<u>Area 13B</u> <u>Fish Springs</u>
Area Fee	\$4,023	\$4,168	\$5,623	\$2,734	\$6,804	\$4,237
TMWA Storage Fee	\$0	\$933	\$933	\$0	\$0	\$0
TMWA Supply-Treatment Fee	\$4,163	\$4,163	\$4,163	\$0	\$0	\$0
Total Connection Fee	\$8,186	\$9,264	\$10,719	\$2,734	\$6,804	\$4,237
Total Per 6K SF SFR	\$5,730	\$6,485	\$7,503	\$1,914	\$4,763	\$2,966

Notes:

1. Heppner Fee is based on 1.3 GPM/lot and includes a per LOT fee for local "subdivision" improvements (currently \$5,490).

Proposed Fees

	<u>Area 8</u> <u>No. Virginia</u>	<u>Area 10</u> <u>Stead-Silver Lake^{1,2}</u>	<u>Area 13A</u> <u>Heppner³</u>	per lot
New Area Fee	\$4,142	\$5,057	\$6,804	
New TMWA Storage Fee	\$772	\$0	\$0	
TMWA Supply-Treatment Fee	\$4,163	\$4,163	\$0	
Total Connection Fee	\$9,077	\$9,220	\$6,804	
Total Per 6K SF SFR	\$6,354	\$6,454		

Notes:

1. For Area 10 service dedicating Fish Springs resources, TMWA S-T Fee = 0
2. Area 8 & 10 Fees include a finance charge
3. Heppner Fee is based on 1.3 GPM/Lot and includes a per Lot fee for local "subdivision" improvements (currently \$5,490).

AREA 10 FEE

Updated Through June 30, 2012

Consolidate Areas 8A, 10, 13

Proposed-Corrected

Actual Costs to Date: \$13,503,644

Improvements:

Project	FY	Total Cost	Exist. Cust.	New Growth	Cost to Growth	Comments
Silver Lake Main Imp.	2005	\$ 985,208	0.000	1.000	\$ 985,208	actual costs
Stead/Peavine Mains - 395 Bore	2005	\$ 965,659	0.751	0.249	\$ 239,986	actual costs
Raleigh-Stead Recharge Main	2007	\$ 1,524,433	0.000	1.000	\$ 1,524,433	actual costs
Stead-N.Virginia Backbone	2008	\$ 29,584,852	0.439	0.158	\$ 4,679,367	actual costs
Horizon Hills BPS Land	2003	\$ 193,000	0.00	1.00	\$ 193,000	actual costs
Horizon Hills Tank #2	2008	\$ 1,744,000	0.00	1.00	\$ 1,744,000	actual costs
Silver Lake Parallel Main	2010	\$ 331,347	0.000	1.000	\$ 331,347	actual costs
Lemmon Valley Well #9	2003	\$ 530,000	0.000	1.000	\$ 530,000	actual costs
Well #9 Genset	2003	\$ 104,000	0.000	1.000	\$ 104,000	actual costs
Cunningham Way Imp.	2006	\$ 97,000	0.000	1.000	\$ 97,000	actual costs
Lemmon Valley Water Mains	2008	\$ 441,000	0.000	1.000	\$ 441,000	actual costs
Raleigh Heights #3	2008	\$ 1,861,178	0.000	1.000	\$ 1,861,178	1/2 of actual costs to Stead
Well #9 Electrical Power	2015	\$ 52,000	0.000	1.000	\$ 52,000	actual costs
Bravo Intertie (Fish Springs)	2014	\$ 721,125	0.000	1.000	\$ 721,125	actual costs
Lemmon Drive Main	2016	\$ 12,820,000	0.172	0.828	\$10,611,015	actual pipe bid + 5 PRS's
N.Virginia 18" (Lemmon-GV Dr)	2016	\$ 1,212,000	0.751	0.249	\$ 301,206	based on actual low bid
pH Adjustment Facilities	2017	\$ 250,000	0.000	1.000	\$ 250,000	Fish Springs C02 System
Raleigh-Stead Gravity Main	2017	\$ 4,933,000	0.751	0.249	\$ 1,225,949	
Highland Gravity Mains	20xx	\$ 3,389,600	0.000	0.040	\$ 135,584	
Stead Golf Course Main Repl	20xx	\$ 2,192,800	0.776	0.224	\$ 491,187	assumes 14" repl.
Paloma BPS Repl.	20xx	\$ 500,000	0.000	1.000	\$ 500,000	repl. w/PRS & main off FS
Replace LV Well #8	20xx	\$ 1,250,000	0.800	0.200	\$ 250,000	assume 20% capacity increase
Lemmon Valley Tank #4	20xx	\$ 2,205,000	0.000	1.000	\$ 2,205,000	2 MG tank w/feeder main
Stead	20xx	\$ 2,000,000	0.000	1.000	\$ 2,000,000	2 MG steel tank
Fish Springs Tank #2	20xx	\$ 2,000,000	0.000	1.000	\$ 2,000,000	2.5 MG tank on exist. Pad
Peaking Wells	20xx	\$ 2,000,000	0.000	1.000	\$ 2,000,000	2 wells at 900 GPM each

Total Cost of Improvements:	\$ 73,887,202	\$35,473,586
Less Area Fees Collected:		\$ (4,400,136) (thru 6/30/12)
Plus Finance Charges Collected:		\$ 29,691 (area 10 + area 13)
Balance Remaining:		\$31,103,141

GPM added since last fee adjustment: 0 GPM
Finance charges collected since last adjust.: \$ -

Max Day Demands:

Available Supply	7,090 gpm	(2380+6500-1790)
Area 10 Sales	(472)	(thru 6/30/12)
Net Remaining GPM	6,618 gpm	

PROPOSED AREA 10 FEE = $\frac{\$31,103,141}{6618 \text{ GPM}}$ = \$4700 /GPM (no finance charge)

Use Existing Area 10 Fee Deficit = $\frac{\$2,364,172}{6618 \text{ GPM}}$ = \$357 (prelim. finance charge)

PROPOSED AREA 10 FEE = \$5057 /GPM (w/finance charge)

AREA 8 FEE

Updated Through June 30, 2012

Proposed

Actual Costs to Date: \$13,101,020

Improvements:

<u>Project</u>	<u>FY</u>	<u>Total Cost</u>	<u>Exist. Cust.</u>	<u>New Growth</u>	<u>Cost to Growth</u>	<u>Comments</u>
Previous PS Rebuilds	2002	\$ 545,492	0.00	1.00	\$ 545,492	actual costs
N.Virginia Parallel Main	2003	\$ 639,762	0.00	1.00	\$ 639,762	actual costs
Stead-N.Virginia Backbone	2008	\$11,915,766	0.00	1.00	\$11,915,766	actual costs
Highland Gravity Mains	20xx	\$ 3,389,600		0.09	\$ 307,307	

Total Cost of Improvements:

\$13,408,326

Less Area 8 Fees Collected:

\$ (6,790,656) (thru 6/30/12)

Plus Finance Charges Collected:

\$ 526,050

Balance Remaining:

\$ 7,143,720

GPM added since last fee adjustment:

1169 GPM

Finance charges collected since last adjust.:

\$ 526,050

Max Day Demands:

2003-2025 WFP Growth	4,660 gpm	
Area 8 Sales	(2,562)	(thru 6/30/12)
Net Remaining GPM	2,098 gpm	

AREA 8 FEE = $\frac{\$7,143,720}{2098 \text{ GPM}}$ = **\$3405 /GPM (no finance charge)**

= \$737 (exist. fin. charge)

PROPOSED AREA 8 FEE = **\$4142 /GPM (w/finance charge)**

N.Virginia-Stead Backbone Facilities and Costs:

<u>Facility</u>	<u>Cost</u>	
Transmission Mains	\$22,079,227	(actual costs)
N.Virginia-Stead P.S.	\$7,505,625	(actual costs)
Total	\$29,584,852	

Demand Summary and Allocation of Backbone Costs:

<u>User/Category</u>	<u>MDD (gpm)</u>	<u>Percent</u>	<u>Allocation</u>
N.Virginia Existing	2540	22.0%	\$6,494,859
Area 8 Growth	4660	40.3%	\$11,915,766
Area 8A Growth	990	8.6%	\$2,531,461
Stead ⁽¹⁾	<u>3380</u>	<u>29.2%</u>	<u>\$8,642,766</u>
	11570	100.0%	\$29,584,852

(1) Includes Stead demand delivered through the Stead Main only.

STORAGE FACILITY CHARGE

Updated Through June 30, 2012

Modified

Actual Costs to Date: \$ 17,856,073

Improvements:

Project	FY	Size (MG)	Type	Total Cost	Exist. Cust.	Develop. Dedicate	Future Growth	Cost to Growth	Uncollectable GPM ⁽¹⁾
Spanish Springs	2002	4.00	PSC	\$ 5,101,474	0.46	0.00	0.54	\$ 2,754,796	
Northgate #3	2002	1.90	STL	\$ 1,312,937	0.55	0.00	0.45	\$ 590,822	
Vaughn Mill	2004	1.20	STL	\$ 1,228,438	0.80	0.00	0.20	\$ 245,688	
Somersett #1	2005	2.10	PSC	\$ 2,530,406	0.00	0.00	1.00	\$ 2,530,406	
Somersett #2	2005	1.00	STL	\$ -	0.00	0.93	0.07	\$ 61,410	400
Beaumont	2005	1.25	STL	\$ 2,340,653	0.51	0.29	0.20	\$ 468,131	212
D'Andrea	2006	1.25	STL	\$ -	0.21	0.79	0.00	\$ 17,256	656
Vista #2	2006	1.50	STL	\$ 1,979,696	0.27	0.00	0.73	\$ 1,445,178	
Ridgeview	2007	1.50	PSC	\$ 5,531,292	0.89	0.00	0.11	\$ 608,442	
Vista #3	2007	0.80	STL	\$ -	0.26	0.74	0.00	\$ 58,017	585
Pyramid	2008	4.00	STL	\$ 4,844,749	0.00	0.00	1.00	\$ 4,844,749	
Raleigh Heights #3	2008	4.00	STL	\$ 1,861,178	0.00	0.00	1.00	\$ 1,861,178	
The Ridges	2008	0.90	STL	\$ -	0.55	0.45	0.00	\$ 236,089	134
Hunter Creek Gravity	2009	4.00	STL	\$ 4,267,824	0.50	0.00	0.50	\$ 2,133,912	
NEST Fdr Main Rel.	2017			\$ 840,000	0.00	0.00	1.00	\$ 840,000	
Sun Valley #2	2018	1.25	STL	\$ 1,670,000	0.67	0.00	0.33	\$ 551,100	
Somersett #3	2021	0.50	STL	\$ -	0.00	0.00	1.00	\$ -	18
Highland Gravity	2022	4.00	PSC	\$ 9,000,000	0.50	0.00	0.50	\$ 4,500,000	
Rattlesnake	2023	1.00	STL	\$ 1,000,000	0.00	0.00	1.00	\$ 1,000,000	
Copper Canyon #1	20xx	2.00	STL	\$ -	0.00	1.00	0.00	\$ -	530
Caughlin #2	20xx	1.50	PSC	\$ 1,440,000	0.90	0.00	0.10	\$ 144,000	
Copper Canyon #2	20xx	1.00	STL	\$ -	0.00	1.00	0.00	\$ -	700
Copper Canyon #3	20xx	0.50	STL	\$ -	0.00	1.00	0.00	\$ -	200
The Pines	20xx	0.50	STL	\$ -	0.00	1.00	0.00	\$ -	398
Northgate #4	20xx	0.75	STL	\$ -	0.00	1.00	0.00	\$ -	500
Beaumont #2	20xx	0.50	STL	\$ -	0.00	1.00	0.00	\$ -	334

Total Storage Costs: \$ 24,891,173 4667
Less Storage Fees Collected (thru 6-30-12): \$ (10,374,673)
 Plus Financing Component of Fees Collected = GPM x Finance Component \$1,605,893
Balance Remaining: \$ 16,122,393

Max Day Demands:

2003-2025 WFP Growth	37,953	gpm	
Developer Build-Dedicate GPM ⁽¹⁾	(4,667)		(from above)
GPM Added/Sales	(9,297)		(thru 6/30/12)
Net Remaining GPM	23,989	gpm	

STORAGE FACILITY CHARGE = \$16,122,393 = **\$672 /GPM** (no finance charge)
UNIT COST 23989 GPM

Use Existing Storage Finance Charge = \$100

REVISED STORAGE FACILITY CHARGE = **\$772** (w/finance charge)

(1) Build & dedicate storage projects will serve some of that demand but will not pay storage fees since they are providing their own storage.