## Water Purification District Capital Plan 2018 - 2022

North Pl	ant Incinerat	tor 2, Intern	al Modifica	tions and	Refractory	Repairs		
Needed internal hearth replace	ement, hearth	ns 1, 2 and 3	with modif	fications a	llowing hea	rth 1 and 2	to becom	e "zero
hearths". These modifications					-			
Existing Project								
Project Financing (in millions of	dollars)							
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Tota
County Debt (Bonds & BANS)								
Appropriations		0.650						0.650
Private Investment								
NYSERDA								
State Reimbursement								-
Federal Reimbursement								-
Total County Cost	-	0.650	-	-	-	-	-	0.650
Capital Committee Recommen	dation: Com	plete as sch	eduled.					
		-+ D		octric Con	oration			
	Waste He	at kecoverv	// Un Site Ei	ecunc den	leration			
Install a system that recovers w	Waste He					s to genera	ite electric	ity which
Install a system that recovers w	vaste heat fro	om the Nort	h Plant Mul	tiple Heat	Incinerator	-		-
will reduce consumption from g	vaste heat fro grid by 33% o	om the Nort	h Plant Mul I basis. Tota	tiple Heat al co-gene	Incinerator ration is pre	edicted to b	e 3.2 milli	on
will reduce consumption from g kwh's/year with a value of \$370	vaste heat fro grid by 33% c 0,000. Also t	om the Nort on an annua he system v	h Plant Mul l basis. Tota vill use a he	tiple Heat al co-gene at exchang	Incinerator ration is pre ge to offloa	edicted to b d heating lo	oe 3.2 milli oad with a	on n annual
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme	vaste heat fro grid by 33% c 0,000. Also t	om the Nort on an annua he system v	h Plant Mul l basis. Tota vill use a he	tiple Heat al co-gene at exchang	Incinerator ration is pre ge to offloa	edicted to b d heating lo	oe 3.2 milli oad with a	on n annual
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013	vaste heat fro grid by 33% c 0,000. Also t	om the Nort on an annua he system v	h Plant Mul l basis. Tota vill use a he	tiple Heat al co-gene at exchang	Incinerator ration is pre ge to offloa	edicted to b d heating lo	oe 3.2 milli oad with a	on n annual
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project	vaste heat fro grid by 33% o 0,000. Also t ent of choice	om the Nort on an annua he system v	h Plant Mul l basis. Tota vill use a he	tiple Heat al co-gene at exchang	Incinerator ration is pre ge to offloa	edicted to b d heating lo	oe 3.2 milli oad with a	on n annual
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of	vaste heat fro grid by 33% o 0,000. Also t ent of choice	om the Nort on an annua he system v will be an o	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of <b>Year</b>	vaste heat fro grid by 33% o 0,000. Also t ent of choice	om the Nort on an annua he system v	h Plant Mul l basis. Tota vill use a he	tiple Heat al co-gene at exchang	Incinerator ration is pre ge to offloa	edicted to b d heating lo	oe 3.2 milli oad with a	on n annual
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS)	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) <b>Pre 2017</b>	om the Nort on an annua he system v will be an o <b>2017</b>	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in Tota
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations	vaste heat fro grid by 33% o 0,000. Also t ent of choice	om the Nort on an annua he system v will be an o	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019	om the Nort on an annua he system v will be an o <b>2017</b>	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 7.906	om the Nort on an annua he system v will be an o <b>2017</b>	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement	vaste heat fro grid by 33% o 0,000. Also t ent of choice f dollars) Pre 2017 1.019 1.019 7.906 (2.038)	om the Nort on an annua he system v will be an o <b>2017</b>	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038)
will reduce consumption from g kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 1.019 7.906 (2.038) (5.869)	om the Nort on an annua he system v will be an o <b>2017</b> 0.356	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038) (5.869)
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement Total County Cost	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 7.906 (2.038) (5.869) 1.018	om the Nort on an annua he system v will be an o 2017 0.356	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> <u>1.375</u> 7.906 (2.038)
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 7.906 (2.038) (5.869) 1.018	om the Nort on an annua he system v will be an o 2017 0.356	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038) (5.869)
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement Total County Cost	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 7.906 (2.038) (5.869) 1.018	om the Nort on an annua he system v will be an o 2017 0.356	h Plant Mul l basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038) (5.869)
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement Total County Cost	vaste heat fro grid by 33% o 0,000. Also t ent of choice f dollars) Pre 2017 1.019 1.019 (2.038) (5.869) 1.018 dation: Com	om the Nort on an annua he system v will be an o 2017 0.356	h Plant Mul I basis. Tota vill use a he rganic ranki	tiple Heat al co-gene at exchang ng cycle sy 2019	Incinerator ration is pre ge to offloa ystem. Proj	edicted to b d heating lo ject was co	be 3.2 milli bad with an mmissione	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038) (5.869)
will reduce consumption from a kwh's/year with a value of \$370 value of \$92,000. The equipme March 2013 Existing Project Project Financing (in millions of Year County Debt (Bonds & BANS) Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement Federal Reimbursement Total County Cost	vaste heat fro grid by 33% o 0,000. Also t ent of choice dollars) Pre 2017 1.019 7.906 (2.038) (5.869) 1.018 dation: Com	om the Nort on an annua he system v will be an o 2017 0.356 0.356 plete as sch	h Plant Mul I basis. Tota vill use a he rganic ranki 2018 2018 - eduled. ant Electric	tiple Heat al co-gene at exchang ng cycle sy 2019 -	Incinerator ration is pre ge to offloa ystem. Proj	2021	2022	on n annual ed in <b>Tota</b> 1.375 7.906 (2.038) (5.869) 1.374

Existing Project								
Project Financing (in millions of	dollars)							
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Total
County Debt (Bonds & BANS)	0.476	1.818						2.294
Appropriations	2.052							2.052
Private Investment								
NYSERDA/ARRA/GIGP								-
State Reimbursement								-
Federal Reimbursement								-
Total County Cost	2.528	1.818	-	-	-	-	-	4.346
Capital Committee Recommen	dation: Com	plete as sc	heduled.					

## Water Purification District Capital Plan 2018 - 2022

Anaero	oic Digestio		ids / Region		cs to Energy	Facility		
Design, construct and operate a	-				÷.	-	evisting u	ltimate
		-					-	
disposal method of sewage sluc	-	•	-		•	-	•	
project will replace aging equip								
organic waste from landfills. Th	nis project w	ould be a n	najor "greei	n" initiative	e and benefi	cially use re	enewable	energy
resources. This would also be a			ship facility					
Amended Project: Change in co		ing						
Project Financing (in millions of								
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Total
County Debt (Bonds & BANS)	-	-	-	12.000	12.000	-	-	24.000
Appropriations	0.136	0.025	1.839	-	-			2.000
Private Investment	-			(12.000)	(12.000)			(24.000)
NYSERDA/ARRA/GIGP				-	· · · ·			-
State Reimbursement								-
Federal Reimbursement								-
Total County Cost	0.136	0.025	1.839	-	-			2.000
Capital Committee Recommen	dation: Con	nplete as sc	heduled.					
North and So	uth Return	and Waste	Activated 9	Sludge Pur	nn Renlacer	nent Proiec	+	
						-		1
Replacement of 40 year old pur								
activated pumping systems at b				-		-		-
treatment process units. This p	roject will a	lso include	energy effic	ciency com	ponents inc	luding ener	gy efficier	nt motors
and variable frequency drives.								
Existing Project								
Project Financing (in millions of	dollars)							
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Total
County Debt (Bonds & BANS)		2.200						2.200
Appropriations	0.074	1.006						1.080
Private Investment	0.071	1.000						1.000
NYSERDA/ARRA/GIGP								_
State Reimbursement								-
Federal Reimbursement								-
Total County Cost	0.074	3.206	-	-	-	-	-	3.280
Capital Committee Recommen			heduled.					
				-				
	N	orth Plant C	Cake Rewet	ting Syste	n			
This project will expand the acc	eptance of	bio-solids fr	om additio	nal regiona	l treatment	facilities wi	th the eq	uipment
installed enabling acceptance o	f sludge cak	e and rewe	t it for proc	essing thro	ough our soli	ids handling	system.	This is
part and parcel to the business	plan for the	waste heat	t cogenerat	ion project	. This will in	crease reve	nues outs	ide of
the rate payers using existing st	•		-					
Amended Project:								
Project Financing (in millions of	dollars)							
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Tota
County Debt (Bonds & BANS)			0.050	1.800	2020		2022	1.850
			5.050	0.150				
				0.130				0.150
Private investment								_
Appropriations Private Investment NYSERDA/ARRA/GIGP State Reimbursement								-
Private investment								-
Private Investment NYSERDA/ARRA/GIGP State Reimbursement	-		0.050	1.950	-		-	- - - 2.000

## Water Purification District Capital Plan 2018 - 2022

## South Plant Preliminary Treatment Building Repair Project

The South plant was constructed in the early 1970's with much of the facility built on pilings. The Preliminary
Treatment building, though built on bedrock, has shifted horizontally causing two major cracks in two walls supporting
the concrete roof panels each weighing over 2,000 lbs. The District will perform an engineering evaluation to
determine what step need to be taken to repair the building
NEW Project

Project Financing (in millions of dollars)								
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Total
County Debt (Bonds & BANS)								-
Appropriations			0.650					0.650
Private Investment								
NYSERDA/ARRA/GIGP								-
State Reimbursement								-
Federal Reimbursement								-
Total County Cost	-	-	0.650	-	-	-	-	0.650
Capital Committee Recommer	ndation: Com	plete as scl	neduled.					

	Sewer Di	strict Capit	al Plan Sur	mmary: All	Projects			
New Projects: 1								
Amended Projects:2								
Existing Projects: 3								
Project Financing (in millions c	of dollars)							
Year	Pre 2017	2017	2018	2019	2020	2021	2022	Total
County Debt (Bonds & BANS)	0.476	4.018	0.050	13.800	12.000	-	-	30.344
Appropriations	3.281	2.037	2.489	0.150	-	-	-	7.957
Private Investment	-	-	-	(12.000)	(12.000)	-	-	(24.000)
NYSERDA	7.906	-	-	-	-	-	-	7.906
State Reimbursement	(2.038)	-	-	-	-	-	-	(2.038)
Federal Reimbursement	(5.869)	-	-	-	-	-	-	(5.869)
Total County Cost	3.756	6.055	2.539	1.950	-	-	-	14.300