

# ***Water Operations – Overview, Goals, and Objectives***

## **Overview**

The Water Operations staff is responsible for monitoring water quality leaving the plant and in the distribution system for the residents and visitors of Nags Head. The water plant is staffed two shifts per day, seven days a week and serves as an after-hours contact for Nags Head citizens wishing to report water problems or seeking information concerning other Town departmental activities.

Water Operations consists of the Eighth Street Water Treatment Plant and storage tank, the Gull Street Pump Station and storage tank, and two 500,000-gallon elevated water storage tanks, one in south Nags Head and the other behind the Public Works complex on Lark Avenue. In addition, Water Operations maintains a state certified laboratory for bacteriological testing to ensure that water quality is in compliance with state and federal regulations.

## **Goals**

- Provide drinking water and fire flows in quantities and quality that meets, or exceeds, all federal and state standards. (BOC Values 2, 4 and 5)
- Maintain the town's water treatment and storage system in optimum operating condition and add needed system enhancements as required to meet increasing state and federal water quality standards. (BOC Values 1, 2, 4, 5 and 6)
- Continually improve customer service and department communications with the public, businesses and other Town departments. (BOC Values 1, 4 and 6)

## **Objectives and Related Performance Indicators**

- **Objective** - Improve water service through water quality enhancements.  
**Performance Indicators** –
  1. Monitor water quality at Oregon Inlet and throughout distribution system.
  2. Continue monitoring and system operational adjustments to reduce TTHM concentration throughout the distribution system in order to meet the Stage 2 Disinfection/Disinfection By-Product Rule.
- **Objective** - Perform scheduled system maintenance to maximize the life of critical system components.  
**Performance Indicators** -
  1. Paint and repairs on the Eighth Street tower and install PAX mixer as recommended following the 2011 Water System Master Plan.
  2. Inspect/Evaluate all pumps and water storage tanks (ground and elevated) to determine estimated service life and required maintenance.
- **Objective** - Plan for future Water Operations capital needs.  
**Performance Indicators** –
  1. Monitor proposed, and established future water quality standard revisions.
  2. Determine how the town can meet future revised standards.
  3. Review/Identify water treatment methods to meet future water quality standards.
  4. Prepare Water Operations CIP to include any future treatment needs/modifications.

# Water Operations – Budget Highlights

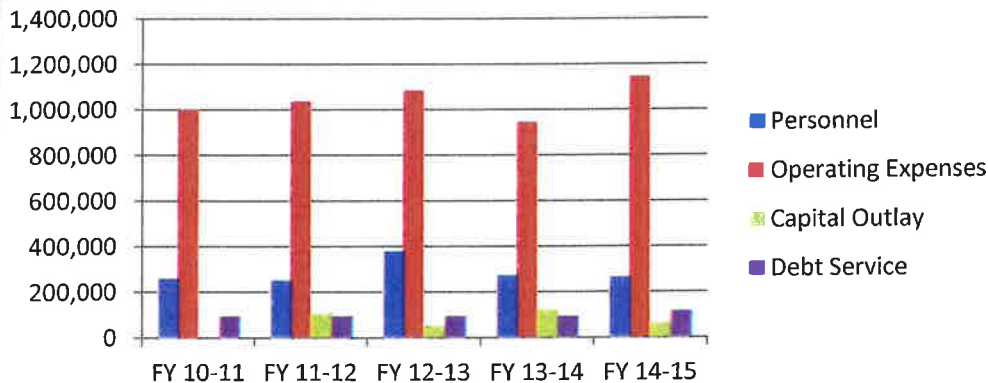
## Highlights

- Debt Service includes the 11th year payment of a loan, financed over 15 years, for the Eighth Street water tower.
- Capital outlay funds of \$63,662 include \$5,100 for a riding mower, \$58,562 for a mixer to help reduce the potential for trihalomethanes formation, and \$156,750 for repainting the Eighth Street water tower.

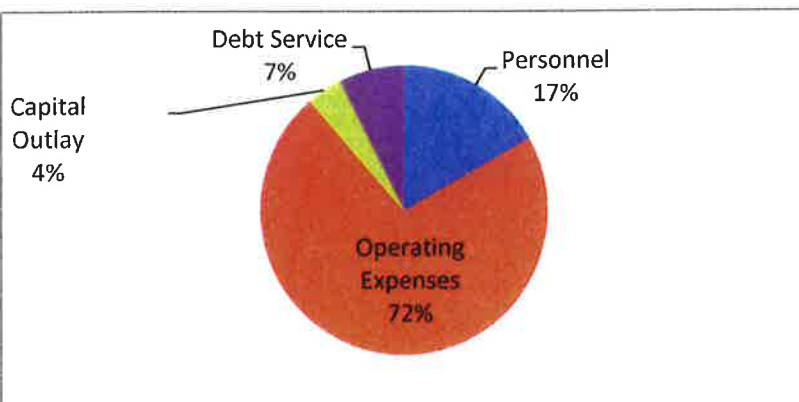
## Expenditures by Function

	FY 2013-2014		FY 2014-2015		Percent
	<u>Adopted</u>		<u>Recommended</u>		<u>Change</u>
Personnel Services	\$	272,894	\$	265,304	-2.78%
Operating Expenses	\$	944,796	\$	1,145,577	21.25%
Capital Outlay	\$	123,120	\$	63,662	-48.29%
Debt Service	\$	93,875	\$	116,807	24.43%
<b>Total</b>	\$	<b>1,434,685</b>	\$	<b>1,591,350</b>	<b>10.92%</b>

## Adopted Expenditure History



## Recommended Fiscal Year 2014-2015 Expenditures by Function



Range of Expend Accounts: 61-810-0-0000-00 to 61-810-9-9999-99  
For Budget: %PY = ((Budgeted / (Appropriated + Transfers)) - 1) \* 100

Description		2010	2011	2012	2013	2014	***** Year 2015 *****	*****	*****	*****
Budget Account Number		Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Requested	Admin. Recmnd	Budgeted	%PY
<b>WATER OPERATIONS</b>										
61-810-0-0000-00	C									
<b>SALARIES/WAGES - REGULAR</b>										
61-810-6-5102-00	S	0.00 0.00	0.00 0.00	173,094.00 179,378.30	270,873.00 276,039.05	184,188.00 152,221.72	175,332.00	175,332.00	_____	0.00
<b>SALARIES - LONGEVITY PAY</b>										
61-810-6-5102-01	S	0.00 0.00	0.00 0.00	5,402.00 5,400.39	9,731.00 9,556.28	7,642.00 4,074.76	6,410.00	6,410.00	_____	0.00
<b>SALARIES/WAGES - PARTTIME</b>										
61-810-6-5103-00	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	_____	_____	_____	0.00
<b>OVERTIME PAY</b>										
61-810-6-5104-00	S	0.00 0.00	0.00 0.00	2,040.00 0.00	1,500.00 669.77	2,040.00 530.19	2,000.00	1,000.00	_____	0.00
<b>HOLIDAY PAY</b>										
61-810-6-5105-00	S	0.00 0.00	0.00 0.00	4,896.00 2,300.01	3,600.00 2,296.62	4,896.00 974.32	4,860.00	2,500.00	_____	0.00
<b>FICA TAX</b>										
61-810-6-5206-00	S	0.00 0.00	0.00 0.00	14,187.00 13,403.93	21,856.00 20,768.80	15,206.00 11,555.41	14,429.00	14,429.00	_____	0.00
<b>GROUP HEALTH INSURANCE</b>										
61-810-6-5207-00	S	0.00 0.00	0.00 0.00	41,309.00 40,101.04	54,984.00 49,993.64	45,443.00 33,310.79	49,327.00	48,216.00	_____	0.00
<b>RETIRES GROUP HEALTH INSUR</b>										
61-810-6-5207-01	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	_____	_____	_____	0.00
<b>EMPLOYEE DENTAL</b>										
61-810-6-5207-10	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	_____	_____	_____	0.00
<b>EMPLOYEE LIFE</b>										
61-810-6-5207-20	S	0.00	0.00	0.00	0.00	0.00	_____	_____	_____	0.00

Description Budget Account Number		2010	2011	2012	2013	2014	***** Year 2015 *****			%PY
		Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Requested	Admin. Recmnd	Budgeted	
CLASS: 61-810-6-0000-00										
		0.00	0.00	0.00	0.00	0.00				
<b>RETIREMENT</b>										
61-810-6-5208-00	S	0.00 0.00	0.00 0.00	12,906.00 12,639.65	19,256.00 19,146.78	14,049.00 11,125.51	13,619.00	13,619.00		0.00
<b>401 K</b>										
61-810-6-5210-00	S	0.00 0.00	0.00 0.00	1,856.00 1,816.68	2,859.00 2,840.64	3,931.00 2,243.14	3,798.00	3,798.00		0.00
<b>STORM DAMAGES/REPAIRS/COSTS</b>										
61-810-6-5319-99	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00				0.00
<b>TRAINING</b>										
61-810-6-5320-00	S	0.00 0.00	0.00 0.00	715.00 610.45	2,235.00 1,434.90	1,310.00 965.00	1,310.00	1,310.00		0.00
<b>COMPUTER TRAINING</b>										
61-810-6-5320-01	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00				0.00
<b>SAFETY TRAINING</b>										
61-810-6-5320-02	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00				0.00
<b>BUILDING/EQUIPMENT RENTAL</b>										
61-810-6-5321-00	S	0.00 0.00	0.00 0.00	800.00 704.86	680.00 657.17	1,240.00 727.72	1,240.00	750.00		0.00
<b>TELEPHONE</b>										
61-810-6-5322-00	S	0.00 0.00	0.00 0.00	5,188.00 4,070.32	5,556.00 3,732.27	5,484.00 2,534.18	5,484.00	4,000.00		0.00
<b>TELEPHONE- CELL PHONE STIPEND</b>										
61-810-6-5322-01	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 280.00	420.00 332.50	420.00	420.00		0.00
<b>UTILITIES</b>										
61-810-6-5323-00	S	0.00 0.00	0.00 0.00	45,000.00 43,246.81	44,000.00 37,881.80	48,775.00 41,882.05	51,836.00	50,000.00		0.00
<b>TRAVEL</b>										
61-810-6-5324-00	S	0.00	0.00	1,200.00	1,505.00	2,200.00	2,200.00	2,200.00		0.00

Description		2010	2011	2012	2013	2014	*****	Year 2015	*****	
Budget Account Number		Approp	Approp	Approp	Approp	Approp	Requested	Admin. Recmnd	Budgeted	%PY
		Actual	Actual	Actual	Actual	Actual				
CLASS: 61-810-6-0000-00										
		0.00	0.00	377.12	657.96	201.05				
<b>POSTAGE</b>										
61-810-6-5325-00	S	0.00	0.00	2,000.00	2,150.00	5,000.00	5,550.00	2,650.00		0.00
		0.00	0.00	1,508.48	1,533.04	1,488.32				
<b>ADVERTISING</b>										
61-810-6-5326-00	S	0.00	0.00	260.00	260.00	260.00	260.00	260.00		0.00
		0.00	0.00	66.00	68.00	160.79				
<b>PRINTING</b>										
61-810-6-5327-00	S	0.00	0.00	2,944.00	4,106.00	5,095.00	5,620.00	3,120.00		0.00
		0.00	0.00	2,683.90	3,127.21	2,687.30				
<b>FUEL COSTS</b>										
61-810-6-5431-00	S	0.00	0.00	7,920.00	9,000.00	8,000.00	9,360.00	7,700.00		0.00
		0.00	0.00	6,611.77	7,654.52	3,874.16				
<b>STREET SUPPLIES</b>										
61-810-6-5432-00	S	0.00	0.00	0.00	0.00	0.00				0.00
		0.00	0.00	0.00	0.00	0.00				
<b>DEPARTMENT SUPPLIES</b>										
61-810-6-5433-00	S	0.00	0.00	20,668.00	25,500.00	25,274.00	26,874.00	25,874.00		0.00
		0.00	0.00	20,493.11	27,366.89	21,584.40				
<b>OTHER SUPPLIES</b>										
61-810-6-5434-00	S	0.00	0.00	4,897.00	6,400.00	7,225.00	7,225.00	6,000.00		0.00
		0.00	0.00	3,458.99	4,585.16	5,439.37				
<b>OTHER SUPPLIES - COMPUTER</b>										
61-810-6-5434-05	S	0.00	0.00	0.00	0.00	0.00				0.00
		0.00	0.00	0.00	0.00	0.00				
<b>MAINT/REPAIR BUILDINGS</b>										
61-810-6-5435-00	S	0.00	0.00	0.00	300.00	1,000.00	1,000.00	1,000.00		0.00
		0.00	0.00	0.00	0.00	0.00				
<b>MAINT/REPAIR EQUIPMENT</b>										
61-810-6-5436-00	S	0.00	0.00	66,019.00	141,400.00	15,200.00	267,286.00	171,000.00		0.00
		0.00	0.00	61,408.14	141,347.70	12,018.13				
<b>MAINT/REPAIR COMPUTER EQUIP.</b>										
61-810-6-5436-01	S	0.00	0.00	0.00	0.00	0.00				0.00

Description Budget Account Number		2010	2011	2012	2013	2014	***** Year 2015 *****			%PY
		Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Requested	Admin. Recmnd	Budgeted	
CLASS: 61-810-6-0000-00										
		0.00	0.00	0.00	0.00	0.00				
<b>VEHICLE MAINTENANCE</b>										
61-810-6-5437-00	S	0.00 0.00	0.00 0.00	1,400.00 963.12	1,400.00 1,440.95	2,000.00 790.10	2,000.00	2,000.00		0.00
<b>VEHICLE REPAIRS</b>										
61-810-6-5437-01	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	500.00 0.00	500.00			0.00
<b>UNIFORMS</b>										
61-810-6-5439-00	S	0.00 0.00	0.00 0.00	1,600.00 1,423.70	1,600.00 1,426.26	2,000.00 1,162.63	2,000.00	2,000.00		0.00
<b>PROFESSIONAL FEES</b>										
61-810-6-5440-00	S	0.00 0.00	0.00 0.00	6,220.00 4,611.90	9,850.00 8,013.00	8,850.00 6,077.24	9,750.00	9,750.00		0.00
<b>CONTRACTED SERVICES</b>										
61-810-6-5445-00	S	0.00 0.00	0.00 0.00	5,640.00 5,514.77	9,000.00 5,615.30	10,000.00 7,964.16	12,080.00	10,080.00		0.00
<b>DRAINAGE</b>										
61-810-6-5446-00	S	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00				0.00
<b>PURCHASES FOR RESALE</b>										
61-810-6-5448-00	S	0.00 0.00	0.00 0.00	825,000.00 701,377.23	790,875.00 730,179.78	791,000.00 576,872.00	796,000.00	786,000.00		0.00
<b>DEPRECIATION EXPENSE</b>										
61-810-6-5550-00	S	0.00 0.00	0.00 0.00	0.00 257,414.00	0.00 0.00	0.00 0.00				0.00
<b>OPEB Funding</b>										
61-810-6-5552-00	S	0.00 0.00	0.00 0.00	0.00 11,785.16	0.00 17,861.05	0.00 0.00				0.00
<b>DUES AND SUBSCRIPTIONS</b>										
61-810-6-5553-00	S	0.00 0.00	0.00 0.00	2,328.00 2,312.36	2,198.00 2,167.36	2,463.00 2,387.36	2,463.00	2,463.00		0.00
<b>INSURANCE</b>										
61-810-6-5554-00	S	0.00	0.00	56,804.00	61,510.00	0.00		57,000.00		0.00

Description		2010	2011	2012	2013	2014	***** Year 2015 *****			
Budget Account Number		Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Requested	Admin. Recmnd	Budgeted	%PY
CLASS: 61-810-6-0000-00										
		0.00	0.00	49,472.54	52,252.00	47,626.00				
<b>COST REIMBURSEMENT</b>										
61-810-6-5699-00	S	0.00	0.00	190,077.00	190,077.00	190,077.00				0.00
		0.00	0.00	190,077.00	190,077.00	190,077.00				
<b>CAPITAL OUTLAY LAND</b>										
61-810-6-5771-00	S	0.00	0.00	0.00	0.00	0.00				0.00
		0.00	0.00	0.00	0.00	0.00				
<b>CAPITAL OUTLAY BUILDINGS</b>										
61-810-6-5772-00	S	0.00	0.00	0.00	0.00	0.00				0.00
		0.00	0.00	0.00	0.00	0.00				
<b>CAPITAL OUTLAY OTHER</b>										
61-810-6-5773-00	S	0.00	0.00	152,024.00	0.00	110,000.00				0.00
		0.00	0.00	152,018.87	0.00	10,000.00				
<b>CAPITAL OUTLAY EQUIPMENT</b>										
61-810-6-5774-00	S	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00		0.00
		0.00	0.00	0.00	46,900.00	23,793.00				
<b>CAPITAL OUTLAY BUDGETARY</b>										
61-810-6-5774-33	S	0.00	0.00	0.00	2,900.00	0.00				0.00
		0.00	0.00	0.00	2,881.98	0.00				
<b>L/P PRINCIPAL</b>										
61-810-6-5781-00	S	0.00	0.00	69,390.00	72,061.00	83,975.00	99,810.00	99,810.00		0.00
		0.00	0.00	69,490.61	72,172.21	22,092.80				
<b>L/P INTEREST</b>										
61-810-6-5782-00	S	0.00	0.00	24,485.00	21,813.00	19,039.00	16,997.00	16,997.00		0.00
		0.00	0.00	24,384.00	21,702.40	0.00				
Control Total		0.00	0.00	1,748,269.00	1,838,035.00	1,650,878.00	1,627,140.00	1,591,350.00	0.00	0.00
		0.00	0.00	1,871,125.21	1,764,327.49	1,198,773.10				
Budgeted Total		0.00	0.00	1,748,269.00	1,838,035.00	1,650,878.00	1,627,140.00	1,591,350.00	0.00	0.00
		0.00	0.00	1,871,125.21	1,764,327.49	1,198,773.10				
Non-Budget Total		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00				
Budget Fund Total		0.00	0.00	1,748,269.00	1,838,035.00	1,650,878.00	1,627,140.00	1,591,350.00	0.00	0.00

Range of Expend Accounts: 61-810-6-5774-00 to 61-810-6-5774-00  
For Budget: %PY = ((Budgeted / (Appropriated + Transfers)) - 1) \* 100

Description Budget Account Number	2010	2011	2012	2013	2014	***** Year 2015 *****		Budgeted	%PY
	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Requested	Admin. Recmnd		
WARNING: Sub without Control Account!									
<b>CAPITAL OUTLAY EQUIPMENT</b>									
61-810-6-5774-00	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00		-0.00
	0.00	0.00	0.00	46,900.00	23,793.00				
Detail: TORO MX 5060 50 IN 23 hp KAWASAKI V-TWIN ZERO TURN RIDING MOWER WITH SMART SPEED						5,100.00	5,100.00	0.00	
WATER PLANT TRUCK REPLACEMENT FOR 2003 FORD RANGER #985 - defer a year						25,000.00	0.00	0.00	
8st tower mixer - from cip						0.00	48,500.00	0.00	
engineering for 8st mixer						0.00	4,000.00	0.00	
12.5% contingency						0.00	6,062.00	0.00	
Note: THIS IS TO REPLACE THE 8 YR OLD CUB CADET LAWN MOWER. THIS MOWER IS USED TO CUT 8TH ST WATER PLANT, GULL ST PUMP STATION,SNH WATER TOWER, 8TH STREET WATER TOWER,PUBLIC WORKS OFFICE BUILDING,RECYCLE ROAD SIDE, TOWN HALL CELL TOWER. THIS QUOTE IS FROM HOME DEPOT. REPLACE 2003 FORD RANGER #985 THIS QUOTE CAME FROM TOM LOWE AT CAPITAL FORD RALIEGH									
Control Total	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00	0.00	0.00
	0.00	0.00	0.00	46,900.00	23,793.00				
Budgeted Total	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00	0.00	0.00
	0.00	0.00	0.00	46,900.00	23,793.00				
Non-Budget Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00				
Budget Fund Total	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00	0.00	0.00
	0.00	0.00	0.00	46,900.00	23,793.00				
Year Total	0.00	0.00	0.00	47,000.00	27,096.00	30,100.00	63,662.00	0.00	0.00
	0.00	0.00	0.00	46,900.00	23,793.00				