

# ***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. Clean and repair on the Eighth Street ground storage tank 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

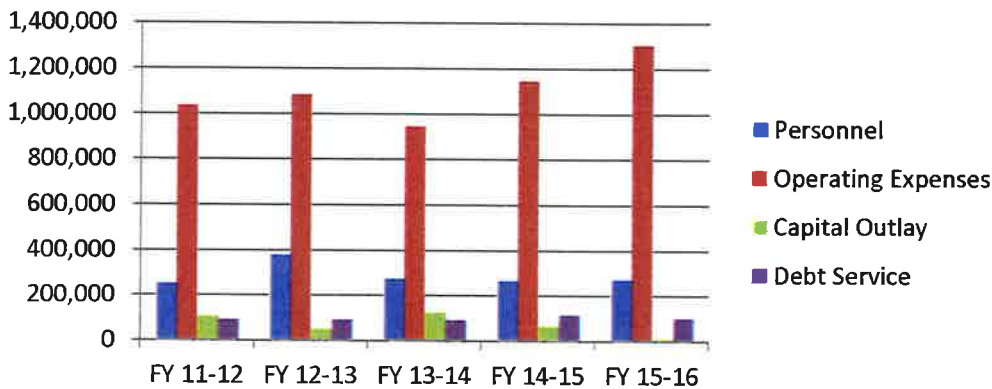
## Highlights

- Debt Service includes the 12th year payment of a loan, financed over 15 years, for the Eighth Street water tower.
- Capital outlay funds of \$9,704 are included for the first year of finance and registration fees for a replacement vehicle.
- Funding of \$906,000 is included for purchasing water from Dare County for resale to Nags Head property owners.

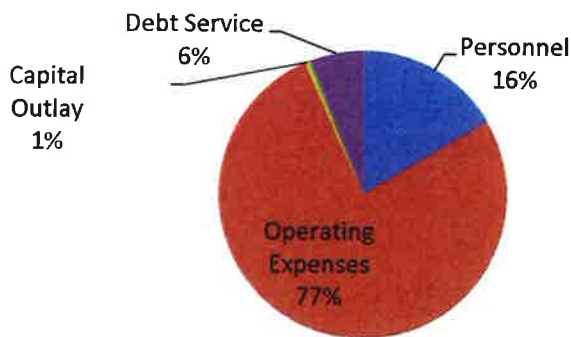
## Expenditures by Function

	FY 2014-2015		FY 2015-2016		Percent
	<u>Adopted</u>		<u>Adopted</u>		<u>Change</u>
Personnel Services	\$	265,824	\$	272,567	2.54%
Operating Expenses	\$	1,145,577	\$	1,303,483	13.78%
Capital Outlay	\$	63,662	\$	9,704	-84.76%
Debt Service	\$	116,807	\$	101,660	-12.97%
<b>Total</b>	\$	<b>1,591,870</b>	\$	<b>1,687,414</b>	<b>6.00%</b>

## Fiscal Year 2015-2016 Adopted Expenditures and Adopted Expenditure History

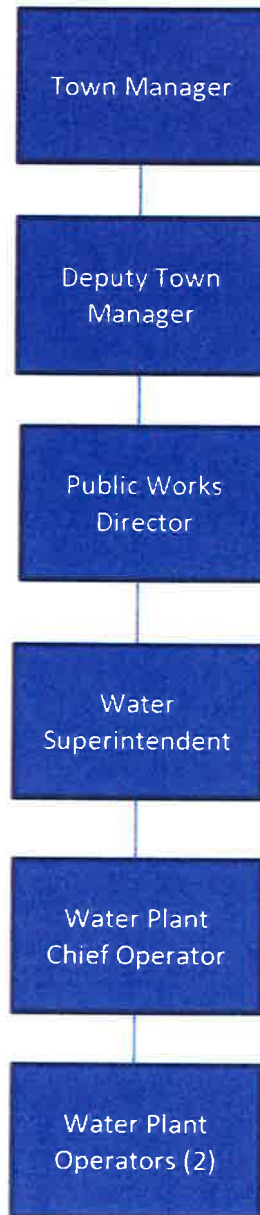


## Adopted Fiscal Year 2015-2016 Expenditures by Function



# ***Water Operations***

## ***Organization and Staffing***



Description	2011	2012	2013	2014	***** 2015 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	%PY
Budget Account Number	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Estimated Full Year	Requested	Admin. Recmnd	Budgeted		
CLASS: 61-810-6-0000-00											
SALARIES/WAGES - REGULAR											
61-810-6-5102-00	0.00	173,094.00	270,873.00	186,738.00	185,924.00		177,612.00	178,455.00	178,455.00		4.02-
	0.00	179,378.30	276,039.05	181,771.86	177,260.41	0.00					
SALARIES - LONGEVITY PAY											
61-810-6-5102-01	0.00	5,402.00	9,731.00	7,642.00	6,506.00		6,507.00	6,507.00	6,507.00		0.02
	0.00	5,400.39	9,556.28	7,553.88	6,506.96	0.00					
SALARIES/WAGES - PARTTIME											
61-810-6-5103-00	0.00	0.00	0.00	0.00	0.00						0.00
	0.00	0.00	0.00	0.00	0.00	0.00					
OVERTIME PAY											
61-810-6-5104-00	0.00	2,040.00	1,500.00	2,040.00	1,015.00		1,500.00	1,500.00	1,500.00		47.78
	0.00	0.00	669.77	597.86	414.42	0.00					
HOLIDAY PAY											
61-810-6-5105-00	0.00	4,896.00	3,600.00	4,896.00	2,538.00		4,860.00	2,500.00	2,500.00		1.50-
	0.00	2,300.01	2,296.62	974.32	0.00	0.00					
FICA TAX											
61-810-6-5206-00	0.00	14,187.00	21,856.00	15,401.00	14,680.00		14,572.00	14,645.00	14,645.00		0.24-
	0.00	13,403.93	20,768.80	14,278.89	13,206.74	0.00					
GROUP HEALTH INSURANCE											
61-810-6-5207-00	0.00	41,309.00	54,984.00	45,443.00	49,022.00		60,148.00	59,672.00	54,117.00		10.39
	0.00	40,101.04	49,993.64	40,893.33	48,799.35	0.00					
RETIRES GROUP HEALTH INSUR											
61-810-6-5207-01	0.00	0.00	0.00	0.00	0.00						0.00
	0.00	0.00	0.00	0.00	0.00	0.00					
EMPLOYEE DENTAL											
61-810-6-5207-10	0.00	0.00	0.00	0.00	0.00						0.00
	0.00	0.00	0.00	0.00	0.00	0.00					
EMPLOYEE LIFE											
61-810-6-5207-20	0.00	0.00	0.00	0.00	0.00						0.00
	0.00	0.00	0.00	0.00	0.00	0.00					
RETIREMENT											
61-810-6-5208-00	0.00	12,906.00	19,256.00	14,229.00	13,566.00		12,705.00	12,761.00	12,837.00		5.37-
	0.00	12,639.65	19,146.78	13,820.47	12,986.41	0.00					

Description	2011	2012	2013	2014	***** 2015 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****
Budget Account Number	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Estimated Full Year	Requested	Admin. Recmnd	Budgeted	%PY
CLASS: 61-810-6-0000-00										
401 K										
61-810-6-5210-00	0.00	1,856.00	2,859.00	3,965.00	3,858.00		3,809.00	2,006.00	2,006.00	48.00-
	0.00	1,816.68	2,840.64	2,632.47	1,946.24	0.00				
STORM DAMAGES/REPAIRS/COSTS										
61-810-6-5319-99	0.00	0.00	0.00	0.00	0.00					0.00
	0.00	0.00	0.00	0.00	0.00	0.00				
TRAINING										
61-810-6-5320-00	0.00	715.00	2,235.00	1,310.00	1,310.00		1,310.00	1,310.00	1,310.00	0.00
	0.00	610.45	1,434.90	1,060.00	1,048.40	0.00				
COMPUTER TRAINING										
61-810-6-5320-01	0.00	0.00	0.00	0.00	0.00					0.00
	0.00	0.00	0.00	0.00	0.00	0.00				
SAFETY TRAINING										
61-810-6-5320-02	0.00	0.00	0.00	0.00	0.00					0.00
	0.00	0.00	0.00	0.00	0.00	0.00				
BUILDING/EQUIPMENT RENTAL										
61-810-6-5321-00	0.00	800.00	680.00	1,240.00	750.00		1,240.00	1,000.00	1,000.00	33.33
	0.00	704.86	657.17	658.12	666.59	0.00				
TELEPHONE										
61-810-6-5322-00	0.00	5,188.00	5,556.00	5,484.00	4,000.00		4,624.00	3,500.00	3,500.00	12.50-
	0.00	4,070.32	3,732.27	3,258.74	2,471.88	0.00				
TELEPHONE- CELL PHONE STIPEND										
61-810-6-5322-01	0.00	0.00	0.00	420.00	420.00		420.00	420.00	420.00	0.00
	0.00	0.00	280.00	420.00	402.50	0.00				
UTILITIES										
61-810-6-5323-00	0.00	45,000.00	44,000.00	48,775.00	50,000.00		52,806.00	50,000.00	50,000.00	0.00
	0.00	43,246.81	37,881.80	57,137.71	45,077.20	0.00				
TRAVEL										
61-810-6-5324-00	0.00	1,200.00	1,505.00	2,200.00	1,200.00		1,975.00	1,975.00	1,975.00	64.58
	0.00	377.12	657.96	484.86	681.58	0.00				
POSTAGE										
61-810-6-5325-00	0.00	2,000.00	2,150.00	5,000.00	2,650.00		5,550.00	2,000.00	2,000.00	24.53-
	0.00	1,508.48	1,533.04	295.13	1,490.35	0.00				

Description Budget Account Number	2011 Approp Actual	2012 Approp Actual	2013 Approp Actual	2014 Approp Actual	***** 2015 ***** Approp Actual      Estimated Full Year	***** 2016 ***** Requested	Admin. Recmnd	Budgeted	%PY
CLASS: 61-810-6-0000-00									
<b>ADVERTISING</b>									
61-810-6-5326-00	0.00	260.00	260.00	260.00	260.00	260.00			0.00
	0.00	66.00	68.00	160.79	66.00	0.00			
<b>PRINTING</b>									
61-810-6-5327-00	0.00	2,944.00	4,106.00	5,095.00	3,120.00	6,325.00	3,000.00	3,000.00	3.85-
	0.00	2,683.90	3,127.21	3,974.85	2,707.80	0.00			
<b>FUEL COSTS</b>									
61-810-6-5431-00	0.00	7,920.00	9,000.00	8,000.00	6,700.00	8,400.00	6,504.00	6,504.00	2.93-
	0.00	6,611.77	7,654.52	5,806.32	5,254.00	0.00			
<b>STREET SUPPLIES</b>									
61-810-6-5432-00	0.00	0.00	0.00	0.00	0.00				0.00
	0.00	0.00	0.00	0.00	0.00	0.00			
<b>DEPARTMENT SUPPLIES</b>									
61-810-6-5433-00	0.00	20,668.00	25,500.00	25,274.00	30,074.00	30,901.00	28,074.00	28,074.00	6.65-
	0.00	20,493.11	27,366.89	24,444.77	29,248.01	0.00			
<b>OTHER SUPPLIES</b>									
61-810-6-5434-00	0.00	4,897.00	6,400.00	7,225.00	12,500.00	11,900.00	6,457.00	6,457.00	48.34-
	0.00	3,458.99	4,585.16	5,408.86	12,427.84	0.00			
<b>OTHER SUPPLIES - COMPUTER</b>									
61-810-6-5434-05	0.00	0.00	0.00	0.00	715.00				0.00
	0.00	0.00	0.00	0.00	712.97	0.00			
<b>MAINT/REPAIR BUILDINGS</b>									
61-810-6-5435-00	0.00	0.00	300.00	1,000.00	1,000.00	26,000.00	1,000.00	1,000.00	0.00
	0.00	0.00	0.00	500.00	872.29	0.00			
<b>MAINT/REPAIR EQUIPMENT</b>									
61-810-6-5436-00	0.00	66,019.00	141,400.00	15,200.00	136,600.00	255,686.00	215,000.00	215,000.00	57.39
	0.00	61,408.14	141,347.70	13,720.73	135,737.38	0.00			
<b>MAINT/REPAIR COMPUTER EQUIP.</b>									
61-810-6-5436-01	0.00	0.00	0.00	0.00	0.00				0.00
	0.00	0.00	0.00	0.00	0.00	0.00			
<b>VEHICLE MAINTENANCE</b>									
61-810-6-5437-00	0.00	1,400.00	1,400.00	2,000.00	2,000.00	2,000.00	1,500.00	1,500.00	25.00-
	0.00	963.12	1,440.95	945.39	365.65	0.00			

Description Budget Account Number	2011 Approp Actual	2012 Approp Actual	2013 Approp Actual	2014 Approp Actual	***** 2015 ***** Approp Actual	***** Estimated Full Year	***** 2016 ***** Requested	Admin. Recmnd	Budgeted	%PY
CLASS: 61-810-6-0000-00										
<b>VEHICLE REPAIRS</b>										
61-810-6-5437-01	0.00 0.00	0.00 0.00	0.00 0.00	500.00 0.00	0.00 0.00		500.00			0.00
<b>UNIFORMS</b>										
61-810-6-5439-00	0.00 0.00	1,600.00 1,423.70	1,600.00 1,426.26	1,450.00 1,188.07	2,000.00 1,961.60		2,000.00	2,000.00	2,000.00	0.00
<b>PROFESSIONAL FEES</b>										
61-810-6-5440-00	0.00 0.00	6,220.00 4,611.90	9,850.00 8,013.00	8,350.00 4,417.24	4,850.00 4,808.59		41,775.00	6,250.00	6,250.00	28.87
<b>CONTRACTED SERVICES</b>										
61-810-6-5445-00	0.00 0.00	5,640.00 5,514.77	9,000.00 5,615.30	10,500.00 9,570.39	10,080.00 8,610.28		16,634.00	11,000.00	11,000.00	9.13
<b>DRAINAGE</b>										
61-810-6-5446-00	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	0.00 0.00	825,000.00 701,377.23	790,875.00 730,179.78	791,000.00 817,402.31	884,910.00 762,057.62		924,290.00	906,000.00	906,000.00	2.38
<b>DEPRECIATION EXPENSE</b>										
61-810-6-5550-00	0.00 0.00	0.00 257,414.00	0.00 0.00	0.00 0.00	0.00 0.00					0.00
<b>OPEB Funding</b>										
61-810-6-5552-00	0.00 0.00	0.00 11,785.16	0.00 17,861.05	0.00 1,969.73-	0.00 0.00					0.00
<b>DUES AND SUBSCRIPTIONS</b>										
61-810-6-5553-00	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 2,092.36		2,493.00	2,493.00	2,493.00	1.22
<b>INSURANCE</b>										
61-810-6-5554-00	0.00 0.00	56,804.00 49,472.54	61,510.00 52,252.00	50,000.00 47,626.00	57,000.00 49,762.51		54,000.00	54,000.00	54,000.00	5.26-
<b>COST REIMBURSEMENT</b>										
61-810-6-5699-00	0.00 0.00	190,077.00 190,077.00	190,077.00 190,077.00	190,077.00 190,077.00	337,097.00 337,097.00					0.00

Description Budget Account Number	2011 Approp Actual	2012 Approp Actual	2013 Approp Actual	2014 Approp Actual	***** 2015 ***** Approp Actual	***** Estimated Full Year	***** Requested	***** 2016 ***** Admin. Recmnd	***** Budgeted	%PY
CLASS: 61-810-6-0000-00										
<b>CAPITAL OUTLAY LAND</b>										
61-810-6-5771-00	0.00	0.00	0.00	0.00	0.00					0.00
	0.00	0.00	0.00	0.00	0.00	0.00				
<b>CAPITAL OUTLAY BUILDINGS</b>										
61-810-6-5772-00	0.00	0.00	0.00	0.00	0.00					0.00
	0.00	0.00	0.00	0.00	0.00	0.00				
<b>CAPITAL OUTLAY OTHER</b>										
61-810-6-5773-00	0.00	152,024.00	0.00	60,000.00	0.00					0.00
	0.00	152,018.87	0.00	20,259.24	0.00	0.00				
<b>CAPITAL OUTLAY EQUIPMENT</b>										
61-810-6-5774-00	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				
<b>CAPITAL OUTLAY BUDGETARY</b>										
61-810-6-5774-33	0.00	0.00	2,900.00	0.00	0.00					0.00
	0.00	0.00	2,881.98	0.00	0.00	0.00				
<b>L/P PRINCIPAL</b>										
61-810-6-5781-00	0.00	69,390.00	72,061.00	83,975.00	85,422.00		88,414.00	88,414.00	88,414.00	3.50
	0.00	69,490.61	72,172.21	82,653.32	85,550.19	0.00				
<b>L/P INTEREST</b>										
61-810-6-5782-00	0.00	24,485.00	21,813.00	19,039.00	16,317.00		13,246.00	13,246.00	13,246.00	18.82-
	0.00	24,384.00	21,702.40	18,926.29	16,189.68	0.00				
Control Total	0.00	1,748,269.00	1,838,035.00	1,650,236.00	1,978,009.00		1,860,462.00	1,692,893.00	1,687,414.00	14.69-
	0.00	1,871,125.21	1,764,327.49	1,597,129.84	1,815,580.80	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	2011	2012	2013	2014	***** 2015 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****	***** 2016 *****
Budget Account Number	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Approp Actual	Estimated Full Year Actual	Requested	Admin. Recmnd	Budgeted	%PY
WARNING: Sub without Control Account!										
CAPITAL OUTLAY EQUIPMENT										
61-810-6-5774-00	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				
Detail: WATER PLANT TRUCK REPLACEMENT FOR 2003							26,000.00	26,000.00	0.00	
FORD RANGER #985 - defered 14/15										
Finance over three years at 3% or 8,924 plus vehicle tax of 780							0.00	9,704.00	9,704.00	
Control Total	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				
Budgeted Total	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				
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	0.00				
Budget Fund Total	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				
Year Total	0.00	0.00	47,000.00	24,045.00	47,462.00		26,000.00	9,704.00	9,704.00	79.55-
	0.00	0.00	46,900.00	23,793.00	47,100.00	0.00				