

## **Winnepesaukee River Basin Program Balanced Scorecard**

The New Hampshire Department of Environmental Services (NHDES) Winnepesaukee River Basin Program (WRBP) operates the state-owned wastewater collection and treatment system serving ten communities in the Lakes Region, represented by a 10-member Advisory Board. Sewer rate payers in these member communities fully fund the WRBP. Consistent communication is critical to the success of the WRBP in that these rate payers deserve to know that their funds are consistently being used effectively and that the WRBP is managed and operated efficiently. A Balanced Scorecard (BSC) is a communication tool for presenting attainment toward achieving specific goals and objectives as annual snapshots in time. The WRBP's BSC was developed through collaboration between NHDES staff and the WRBP Advisory Board. The goals are presented in four major categories which align with NHDES' overarching strategic plan – Customer Satisfaction, Operational Performance, Effective Resource Management, and Employee Development. Within these four goal categories, measurable objectives that could be presented as numeric metrics were developed specifically for the WRBP based on internal (NHDES staff and management) and external audience priorities (Advisory Board members representing rate payer interests). Not every metric that is, or may be, monitored by the WRBP was presented, so a vetting process was implemented to assure that the subset of information presented maintained a balance between noteworthy successes and areas for improvement. By using the BSC approach to develop and then reassess goals and attainment toward defined objectives each year, the WRBP will be able to effectively communicate accomplishments, monitor key performance parameters, and focus resources on improving the program's effectiveness. The BSC was modified in 2017 to better monitor Effective Resource Management. The BSC continues to track the number of repeat, preventable callbacks for the same emergency situation, but two new measures were added to differentiate between callbacks hours attributable to the WWTP versus those attributable to the collection system. Monitoring these measures will further assist WRBP staff in identifying potential corrective measures and focusing resource needs to reduce both the number and labor hours involved in responding to such preventable incidents. The 2020 BSC demonstrated that 6 measures met expectations and 6 measures still need additional resources or added focus to meet goals. Trending continues to be monitored for 7 additional measures in order to appropriately focus resources. 2 of those trends (energy efficiency and financial spend rate) have met or exceeded expectations and are trending positively. Non-SCADA overtime trended upward in 2020 with staffing levels being reevaluated. The WRBP's BSC was updated to reflect 2021 goals for sustained and continuous improvement.

## **Acknowledgement**

Implementation of the BSC Initiative for the WRBP would not be possible without support and input from WRBP section supervisors and staff and the WRBP Advisory Board. Their commitment to the process of continuous improvement and consistent, effective communications is invaluable.

## WINNIPESAUKEE RIVER BASIN PROGRAM (WRBP) BALANCED SCORECARD

Goal	Objective	Measure	Units	2015 Benchmark Values <sup>(1)</sup>	2016 Attainment	2017 Attainment	2018 Attainment	2019 Attainment	2020 Attainment	2021 Goal	Corrective Measures/Comments	
Customer Satisfaction	Eliminate Sewer Discharges to the Environment	Sanitary sewer overflow (SSOs)	# SSOs/year	0	0	0	2	2	1	0	Continue routine inspections and performance of any necessary repairs. Septage receiving tank overflowed at WWTP.	
	Minimize Objectionable Odor Impacts	Odor complaints	# of Odor Complaints/year	0	0	1	0	0	1	0	Monitor air scrubbers' effectiveness; operate units and replace activated carbon as necessary.	
	Stable Community Assessments	Operating Expenditures 5 year rolling Average Percent Change	% Change	1.3%	-1.7%	0.2%	0.8%	-1.7%	-0.9%	< 5%	Goal is estimated based on anticipated personnel cost increases in FY biennial budgets.	
	Prompt Permit Turnaround Time	Days to approve permit from date complete application received	Average Working Days at the WRBP	44	18	20	28	18	14	≤ 30 working days	Electronic permit forms, checklists, monitor turnaround time, outreach to minimize # of incomplete applications.	
Operational Performance	NPDES Permit Compliance	Discharge permit violations (all types)	# Violations/year	1	2	0	2	2	1	0	Track violation types separately & determine measures to eliminate causes.	
	WRBP Facilities' Permits Compliance	Violations for all 15 WRBP facilities' permits	# Violations/Year	0	0	0	0	0	0	0	Track violation types separately & determine measures to eliminate causes.	
Effective Resource Management	Minimize Emergency Callbacks for Preventable Events	Repeat overtime call-backs for the same situation	# Repeat Callbacks/Year	11	9	13	22	24	32	< 10	Track repeat, preventable callbacks to identify commonality, priorities, and corrective actions/costs to eliminate causes. Majority of callbacks were attributable to the WWTP boiler failing when on biogas (15) and WWTP doors contact closures creating intrusion false alarms (9). Corrected action taken: Boiler operating on fuel oil until heating system retrofit; doors and dosures replaced.	
		Call-backs attributable to Collection System	Collection System Call-back hours/Total call-back hours (%)				85%	63%	78%	14%	≤ 50%	New metric in 2017: Compare labor hours attributable to all callbacks for the Collection System. Details will help target resources to reduce callbacks for preventable incidents.
		Call-backs attributable to WWTP	WWTP Call-back hours/Total call-back hours (%)				15%	37%	22%	86%	≤ 50%	New metric in 2017: Compare labor hours attributable to all callbacks for the WWTP. Details will help target resources to reduce callbacks for preventable incidents.
	Minimize Major Equipment Downtime	Unresolved, Aged Malfunction Reports	Major malfunctions unresolved in 45 days/total # per year (%)	6/46 = 13%	2/24 = 8%	1/19 = 5.3%	9/39 = 23%	8/43 = 19%	6/28 = 21%	< 10%	Tracks repair or replacement needs that require additional external technical expertise or need to be coordinated with other work before completion.	
	Effectively Manage Fleet Resources	Fleet Vehicle Miles to maintain facilities	Vehicle miles per year/ # of vehicles/ 14 facilities	37,853/10/14 = 270	43,897/13/14 = 241	52,542/13/14 = 289	44,018/12/14 = 262	46,859/12/14 = 279	45,938/12/14 = 273	< 300	Tracks vehicle use trends and adequacy to perform necessary functions.	
	Effectively Manage Personnel Resources	Maintain adequate staffing levels	Non-SCADA Overtime Hours/Total Hours Worked	821/48,742 = 2%	161/44,824 = 0.4%	496.5/39,922 = 1.2%	439/44,499 = 1.0%	767/76,869 = 1.0%	779/43,423 = 1.8%	≤ 1%	Monitor FY-over-FY overtime trend (excluding SCADA on call overtime) that could indicate understaffing or identify other issues requiring attention.	
	Consistent Budgetary Controls	O&M Expenditures versus Fiscal Year Budgets	% FY spend rate (\$ budget/\$ expended)	77%	81%	77%	87%	87%	90%	≥ 80%	Monitor expenditures vs biennial FY budget; improve forecast based on spend rate trends and program needs.	
Minimize Energy Footprint	Electrical Energy Use at WRBP WWTP	kWh/Million Gallons (MGD)/FY	2,069,900/2014 = 1028	1,887,800/1900 = 994	2,087,200/2269 = 920	2,046,000/2402 = 852	2,012,800/2436 = 826	1,619,713/2312 = 701	< 800	Monitor electricity usage; identify potential alternative power sources and energy efficiency improvements.		
Employee Development	Effective Resource management	Employee Injury Incident Rate	Hours lost time/hours worked (%)	0%	0%	0%	0%	0%	0%	0%	Continued focus on a safe work environment and consistent safety training.	
	Implement Strategic Workforce Planning	Transition planning for each functional section	# of plans for 5 functional sections	3	4	4	4	4	4	4	5	Transition and succession plans in place with effective knowledge transfer to minimize disruption of operations with vacancies; organization, reclassification and job descriptions are current and meet present and future needs.
		Timely Employee Evaluations	# evaluations > 1 year old/ total # filled positions (%)	0%	0%	0%	0%	0%	0%	0%	0%	Employee evaluations performed annually and include achievable goals.
		Effective staff recruitment and retention	# filled positions/ necessary positions (%)	20 of 22 = 91%	18 of 20 = 90%	18 of 20 = 90%	19 of 20 = 95%	18 of 20 = 90%	18 of 22 = 82%	100%	Evaluate open positions to determine need to fill; identify appropriate job accountabilities, knowledge and skills.	
	Cross training Implemented	# positions with trained back-up/ total # necessary positions (%)	19 of 22 = 86%	18 of 20 = 90%	18 of 20 = 90%	18 of 20 = 90%	18 of 20 = 90%	17 of 22 = 77%	100%	Implement employee mentoring and cross training plans; include in transition plan for each section.		

- Green: Area meeting objective goal
- No Color: Monitor trends to determine appropriate future goals and objectives.
- Yellow: Area identified as needing improvement or additional focus
- Grey: Metric not being tracked.

NOTES:  
 (1) Dates represent calendar year information except for financial information which is presented by State fiscal year (FY); running from July 1st to June 30th of the subsequent year. 2015 was the initial, benchmark year of the WRBP Balanced Scorecard so no retroactive goals were presented.  
 (2) Goals are based on outcomes from prior year or compliance/DES requirements; while the basis for other goals are described in the comments.

