



Operation Number: **BH-L1028**
Year- PMR Cycle: **First period Jan-Jun 2016**
Last Update: **10/13/2016**
PMR Validation Stage: **Validated by Chief of Operations**

Chief of Operations validation date: **10/17/2016**
Division Chief validation date:
Country Representative validation date:

Inter-American Development Bank - IDB
Office of Strategic Planning and Development Effectiveness

Operation Profile

Basic Data

| | | | |
|------------------------|--|-------------------|---|
| Operation name: | WSC Support Program - New Providence Water Supply and Sanitation Systems Upgrade | Loan Number: | 2624/OC-BH |
| Executing Agency (EA): | WATER AND SEWERAGE CORPORATION / MINISTRY OF WORKS | | |
| Team Leader: | Mellinger, Yvon | Sector/Subsector: | AS |
| Operation Type: | Loan Operation | Overall Stage: | Disbursing (From eligibility until all the Operations are closed) |
| Lending Instrument: | Investment Loan | Country: | BAHAMAS |
| Borrower: | WATER AND SEWERAGE CORPORATION / MINISTRY OF WORKS | | Convergence related Operation(s): |

Total Cost and Source

| | Original IDB | Current Active IDB | Local Counterpart | Co-Financing/Country | Total operation cost - Original Estimate |
|----------|-----------------|--------------------|-------------------|----------------------|--|
| BH-L1028 | \$81,000,000.00 | \$81,000,000.00 | \$0.00 | | \$81,000,000.00 |

Available Funds (US\$)

| | Current IDB | Disb. Amount to Date | % Disbursed | Undisbursed Balance |
|----------|-----------------|----------------------|-------------|---------------------|
| BH-L1028 | \$81,000,000.00 | \$64,939,279.05 | 80.17% | \$16,060,720.95 |

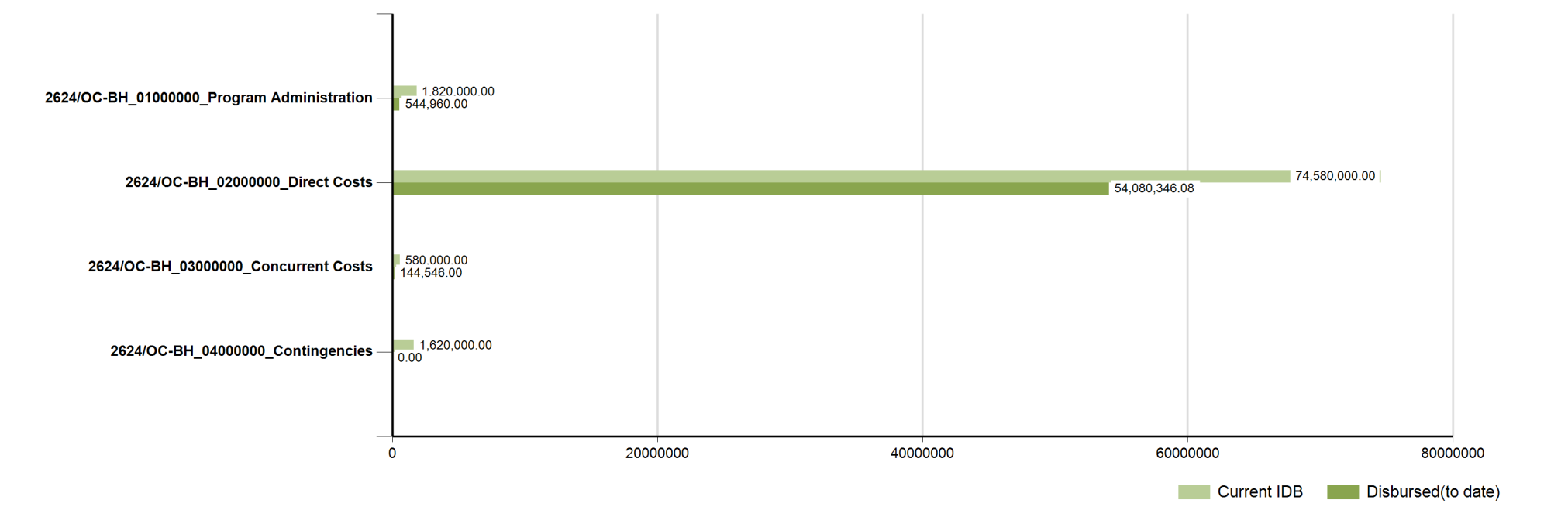
Environmental and Social Safeguards

| | |
|---|---|
| Main Operation | |
| Impacts Category: | B |
| Safeguard Performance Rating: | |
| Safeguard Performance Rating - Rationale: | |

Reformulation Information

| | |
|---|----|
| Main Operation | |
| Was/Were the objective(s) of this operation reformulated? | NO |
| Date of approval: | |

Expense Categories by Loan Contract (cumulative values)



Results Matrix

Impacts

| Impact: | 1 A Financially viable Water and Sewerage Corporation (WSC). | | | | | | | | | | | | | |
|--|--|-----------------|-----------|---------------|---|--|------|----------|----------|----------|----------|----------|----------|----------|
| Observation: | The WSC and GOBH are committed to achieving the Project objectives | | | | | | | | | | | | | |
| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | |
| 1.1 Water and Sewerage Corporation (WSC) operating cost recovery (Revenues Collected/Operating Cost) | | % | 61.00 | 2011 | WSC Annual Audited Financial Statements | % as proportion of Revenue collected/operating Cost | P | 61.00 | 65.00 | 70.00 | 75.00 | 80.00 | | |
| | | | | | | | P(a) | 61.00 | 65.00 | 70.00 | 75.00 | 80.00 | | |
| | | | | | | | A | 60.00 | 56.00 | 60.00 | 68.00 | | | |
| 1.2 Increase in number of active (water) connections | | Connections | 60,099.00 | 2011 | This indicator will be measured through WSC commercial registry. Baseline has been updated to 2010. | Through project activities, number of active connection is expected to increase substantially, which will be instrumental in reaching this Country Strategy indicator. | P | 1,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | 2,000.00 | | |
| | | | | | | | P(a) | 1,000.00 | 2,000.00 | 2,000.00 | 2,500.00 | 1,500.00 | 2,500.00 | 2,500.00 |
| | | | | | | | A | 1,375.00 | 1,523.00 | 500.00 | 692.00 | | | |

| | | | | | | | | | | | | | | |
|---------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Impact: | 2 Establishment of an economic and environmental regulator to regulate the activities of the Water and Sewerage Corporation (WSC) | | | | | | | | | | | | | |
| Observation: | At the start of the project, the GOBH is committed and ready to make important steps in the right direction, as confirmed by the project conditions prior | | | | | | | | | | | | | |

| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | |
|---|--------|-----------------|----------|---------------|-----------------------|--|------|------|------|------|------|------|------|--|
| 2.1 Regulatory functions are separated from the provision of services | | Law approved | 0.00 | 2011 | Law promulgated. | Economic regulation is separated from WSC. | P | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | | |
| | | | | | | | P(a) | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | |
| | | | | | | | A | | | 0.00 | 0.00 | | | |



-  RF - Contribution
-  RF - Alignment
-  RF - Strategic Alignment
-  RF - Strategic Alignment during Execution
-  SI - Sector Indicator
-  CI - Country Indicator
-  PG - Pro-Gender
-  PE - Pro-Ethnicity

Outcomes

| Outcome: | 1 Non Revenue Water (NRW) reduced | | | | | | | | | | | | | |
|--|---|--------------------------|----------|---------------|---|--------------|------|------|------|------|------|------|------|------|
| Observation: | Volume of NRW is calculated as yearly average, this important indicator is showing better results than those envisaged initially. | | | | | | | | | | | | | |
| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | EOP |
| 1.1 Volume of Non Revenue Water NRW (average daily volume) | | Million Imperial Gallons | 6.87 | 2012 | WSC approved water balance from contractor report | | P | 5.30 | 4.70 | 4.00 | 3.30 | 2.50 | | 2.50 |
| | | | | | | | P(a) | 5.30 | 6.00 | 5.50 | 4.30 | 2.80 | 2.50 | 2.25 |
| | | | | | | | A | 6.50 | 6.49 | 4.53 | 3.05 | 0.00 | | |

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| EOP |
|------|
| 1.00 |
| 1.00 |
| |

| | | | | | | | | | | | | | | | |
|---|---|-----------------|-------|-------|--------------------------------------|------|-------------|--------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1.2 Households with improved access to drinking water in house (better pressure, quality and volume) |  | Household s (#) | 0.00 | 2011 | WSC commercial and technical reports | | P | 0.00 | 5,000.00 | 10,000.00 | 10,000.00 | 13,000.00 | | | 38,000.00 |
| | | | | | | | P(a) | 0.00 | 3,000.00 | 8,000.00 | 6,000.00 | 5,000.00 | 15,000.00 | 18,000.00 | 38,000.00 |
| | A | | | 0.00 | 0.00 | 0.00 | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 1.3 Households with new access to drinking water in house |  | Household s (#) | 0.00 | 2011 | WSC commercial reports | | P | 0.00 | 0.00 | 0.00 | 500.00 | 1,500.00 | | | 2,000.00 |
| | | | | | | | P(a) | 0.00 | 0.00 | 0.00 | 0.00 | 1,000.00 | 1,000.00 | | 2,000.00 |
| | A | | | 0.00 | 1,112.00 | 0.00 | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 1.4 Households changing from using private individual wells to becoming clients of the Water and Sewerage Corporation (WSC) | | Household s | 0.00 | 2011 | Socioeconomic surveys | | P | 500.00 | 500.00 | 1,000.00 | 1,000.00 | 2,000.00 | | | 5,000.00 |
| | | | | | | | P(a) | 500.00 | 500.00 | 500.00 | 400.00 | 500.00 | 1,500.00 | 2,611.00 | 5,000.00 |
| | A | 102.00 | 54.00 | 67.00 | 166.00 | 0.00 | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | | | | | | | | | |
|--|--------|-----------------|------------|---------------|-----------------------|---|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | | | | | | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | EOP | |
| 2.1 Annual amount spent on staff overtime | | US\$ | 109,000.00 | 2011 | WSC HR report | SCADA will eliminate need for staff to visit stations/facilities outside normal working hours, and improve response to failures | P | 109,000.00 | 103,550.00 | 98,100.00 | 87,200.00 | 81,750.00 | | | 81,750.00 |
| | P(a) | | | | | | 109,000.00 | 105,000.00 | 98,100.00 | 87,200.00 | 81,750.00 | 75,000.00 | 75,000.00 | 75,000.00 | |
| | A | | | | | | 113,107.00 | 112,421.00 | 98,750.00 | 79,650.00 | 0.00 | | | | |
| | | | | | | | | | | | | | | | |
| 2.2 Win-back customers (households reconnected) | | Households | 0.00 | 2011 | WSC commercial report | | P | 0.00 | 0.00 | 0.00 | 500.00 | 1,500.00 | | | 2,000.00 |
| | P(a) | | | | | | 0.00 | 0.00 | 0.00 | | 500.00 | 1,000.00 | 500.00 | 2,000.00 | |
| | A | | | | | | | | 0.00 | 0.00 | 0.00 | | | | |
| 2.3 Large commercial customers billed in accordance to metered consumption | | % | 84.00 | 2011 | WSC Commercial Report | | P | 84.00 | 90.00 | 95.00 | 98.00 | 98.00 | | | 98.00 |
| | P(a) | | | | | | 84.00 | 85.00 | 90.00 | 95.00 | 95.00 | 98.00 | 98.00 | 98.00 | |
| | A | | | | | | 87.00 | 85.00 | 93.00 | 89.00 | 0.00 | | | | |
| | | | | | | | | | | | | | | | |

| | |
|--------------|--|
| Observation: | Waste water action Plan not yet finalized. |
|--------------|--|

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| | | | | | | | | | | | | | | | | | |
|--|---|--|------------|-----------|------|---|---|---|--|--|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 3.3 Households with treated wastewater | | | Households | 62,491.00 | 2011 | WSC semi annual report, Consultant's Reports. | The baseline and projections have been estimated assuming that only 36% of the volume of water treated by wastewater treatment plants corresponds to households (the balance corresponds to commercial connections). The information will be confirmed and validated once the Waste water Master Plan is completed. In addition, the baseline includes households with septic tanks (i.e. primary treatment). | P | | | | | | | | | |
| | | | | | | | P(a) | | | | 1,073.00 | 62,491.00 | 64,000.00 | 65,500.00 | 67,000.00 | 67,000.00 | |
| | | | | | | | A | | | | 62,491.00 | 62,491.00 | 0.00 | | | | |
| | | | | | | | | | | | | | | | | | |
| Outcome: | 4 Legal and regulatory framework upgraded | | | | | | | | | | | | | | | | |
| Observation: | Draft legislation under review. | | | | | | | | | | | | | | | | |

| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2012 | | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | EOP |
|---|--------|-----------------|----------|---------------|-----------------------|--------------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | | | | |
| 4.1 Water and Sewerage Corporation (WSC) licence from economic regulator | | Licence | 0.00 | 2011 | License issued | | P | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | | | 1.00 |
| | P(a) | | | | | | 0.00 | 0.00 | 0.00 | | 0.00 | 1.00 | | 1.00 | |
| | A | | | | | | | | 0.00 | 0.00 | 0.00 | | | | |
| | | | | | | | | | | | | | | | |
| 4.2 Water and Sewerage Corporation (WSC) licence from environmental regulator | | Licence | 0.00 | 2011 | Licence issued | | P | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | | | 1.00 |
| | P(a) | | | | | | 0.00 | 0.00 | 0.00 | | 0.00 | 1.00 | | 1.00 | |
| | A | | | | | | | | 0.00 | 0.00 | 0.00 | | | | |
| | | | | | | | | | | | | | | | |

-  RF - Contribution
-  RF - Alignment
-  RF - Strategic Alignment
-  RF - Strategic Alignment during Execution
-  SI - Sector Indicator
-  CI - Country Indicator
-  PG - Pro-Gender
-  PE - Pro-Ethnicity

Outputs: Annual Physical and Financial Progress

| Non Revenue Water (NRW) Reduced | | Physical Progress | | | Financial Progress | | |
|--|-----------------|-------------------|----------|-----------|--------------------|--------------|---------------|
| Outputs | Unit of Measure | | 2016 | EOP | | 2016 | EOP |
| Non Revenue Water strategy developed (including baseline study) | Strategy | P | | 1.00 | P | | 3,000,000.00 |
| | | P(a) | | 1.00 | P(a) | | 3,000,000.00 |
| | | A | | 1.00 | A | | 3,000,000.00 |
| Service connections replaced, maintained or disconnected | Connections | P | 7,000.00 | 23,000.00 | P | 4,100,000.00 | 13,500,000.00 |
| | | P(a) | 2,400.00 | 23,000.00 | P(a) | 0.00 | 13,500,000.00 |
| | | A | 1,120.00 | 20,678.00 | A | 1,027,258.00 | 14,527,258.00 |
| Leaks detected and repaired | Leaks | P | 1,500.00 | 6,000.00 | P | 7,600,000.00 | 30,000,000.00 |
| | | P(a) | 960.00 | 6,000.00 | P(a) | 0.00 | 30,000,000.00 |
| | | A | 369.00 | 4,741.00 | A | 342,419.00 | 30,342,419.00 |
| Non Revenue Water (NRW) asset management information system developed | System | P | | 1.00 | P | | 2,000,000.00 |
| | | P(a) | | 1.00 | P(a) | | 2,000,000.00 |
| | | A | | 1.00 | A | | 2,000,000.00 |
| Training workshops on Non Revenue Water (NRW) management | workshops | P | 10.00 | 10.00 | P | 100,000.00 | 500,000.00 |
| | | P(a) | 5.00 | 10.00 | P(a) | 0.00 | 500,000.00 |
| | | A | 0.00 | 2.00 | A | 0.00 | 500,000.00 |
| Water and Sewerage Corporation (WSC) Strengthened | | Physical Progress | | | Financial Progress | | |
| Outputs | Unit of Measure | | 2016 | EOP | | 2016 | EOP |
| Supervisory Control And Data Acquisition (SCADA) system purchased and installed | System | P | | 1.00 | P | | 1,000,000.00 |
| | | P(a) | | 0.00 | P(a) | | 1,000,000.00 |
| | | A | | 1.00 | A | | 1,000,000.00 |
| Automated meters reading/intelligence system for large commercial customers installed | System | P | | 3,000.00 | P | | 500,000.00 |
| | | P(a) | 0.00 | 3,000.00 | P(a) | 500,000.00 | 500,000.00 |
| | | A | 0.00 | 0.00 | A | 0.00 | 0.00 |
| Public relations campaign for project and customer win-back campaign implemented | Campaign | P | | 2.00 | P | 300,000.00 | 1,500,000.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 255,842.00 | 1,500,000.00 |
| | | A | 0.00 | 0.00 | A | 198,767.00 | 912,133.00 |
| New organizational structure implemented (including staff training) | Structure | P | | 1.00 | P | | 2,000,000.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 205,766.00 | 2,000,000.00 |
| | | A | 0.00 | 0.00 | A | 109,101.00 | 856,310.00 |
| Tariff study for economic regulation prepared | Study | P | | 1.00 | P | | 500,000.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 24,495.00 | 500,000.00 |
| | | A | 1.00 | 1.00 | A | 24,495.00 | 244,950.00 |
| Wastewater treatment plants upgraded and wastewater treatment action plan prepared | | Physical Progress | | | Financial Progress | | |
| Outputs | Unit of Measure | | 2016 | EOP | | 2016 | EOP |
| Lift stations rehabilitated/upgraded | Lift stations | P | 10.00 | 60.00 | P | 160,000.00 | 950,000.00 |
| | | P(a) | 4.00 | 13.00 | P(a) | 500,000.00 | 950,000.00 |
| | | A | 0.00 | 0.00 | A | 0.00 | 0.00 |
| Collection systems and force mains rehabilitated/installed | Miles | P | 1.00 | 4.00 | P | 850,000.00 | 3,850,000.00 |
| | | P(a) | 0.00 | 1.00 | P(a) | 1,000,000.00 | 3,555,575.00 |
| | | A | 0.00 | 0.00 | A | 0.00 | 0.00 |
| Wastewater master plan for New Providence prepared | Plan | P | | 1.00 | P | | 780,000.00 |
| | | P(a) | | 1.00 | P(a) | 150,959.00 | 1,074,425.00 |
| | | A | 0.00 | 1.00 | A | 0.00 | 923,466.00 |
| Wastewater infrastructure (treatment plants and disposal wells) rehabilitated or constructed | Infrastructure | P | 3.00 | 9.00 | P | 2,500,000.00 | 10,000,000.00 |
| | | P(a) | 0.00 | 5.00 | P(a) | 2,100,000.00 | 10,000,000.00 |
| | | A | 0.00 | 0.00 | A | 0.00 | 0.00 |

| Legal and regulatory framework upgraded | | Physical Progress | | | Financial Progress | | |
|---|-----------------|-------------------|------|------|--------------------|------------|--------------|
| Outputs | Unit of Measure | 2016 | | EOP | 2016 | | EOP |
| Draft legislation presented | Legislation | P | | 2.00 | P | | 250,000.00 |
| | | P(a) | | 2.00 | P(a) | 204,536.00 | 250,000.00 |
| | | A | | 2.00 | A | 0.00 | 12,472.00 |
| Regulators established | Regulators | P | | 2.00 | P | 600,000.00 | 2,750,000.00 |
| | | P(a) | 0.00 | 2.00 | P(a) | 500,000.00 | 2,750,000.00 |
| | | A | 0.00 | 0.00 | A | 0.00 | 0.00 |
| Management, contingencies and others | | | | | | | |

| Other Cost | | 2016 | Cost |
|--------------------------------------|------|-----------------|-----------------|
| Engineering and supervisory services | P | \$400,000.00 | \$1,820,000.00 |
| | P(a) | \$261,150.00 | \$1,820,000.00 |
| | A | \$0.00 | \$555,794.00 |
| Audits | P | \$24,000.00 | \$120,000.00 |
| | P(a) | \$9,000.00 | \$56,424.00 |
| | A | \$0.00 | \$23,424.00 |
| Monitoring and Evaluation | P | \$222,000.00 | \$460,000.00 |
| | P(a) | \$0.00 | \$176,179.00 |
| | A | \$0.00 | \$129,631.00 |
| Contingencies | P | \$1,040,000.00 | \$3,120,000.00 |
| | P(a) | \$1,420,000.00 | \$3,120,000.00 |
| | A | \$0.00 | \$0.00 |
| Financial charges | P | \$480,000.00 | \$2,400,000.00 |
| | P(a) | \$600,000.00 | \$2,747,397.00 |
| | A | \$586,432.00 | \$1,833,829.00 |
| Total Cost | | 2016 | Total Cost |
| | P | \$18,376,000.00 | \$81,000,000.00 |
| | P(a) | \$7,731,748.00 | \$81,000,000.00 |
| | A | \$2,288,472.00 | \$56,861,686.00 |

Changes to the Matrix

No information related to this operation.

Please note that the Overall Stage represents the stage of the operation at the time of this report's publication, which might not necessarily match the stage of the operation during the PMR Cycle to which the report pertains.