



Operation Number: **NI-L1017**
Year- PMR Cycle: **Second period Jan-Dec 2013**
Last Update: **6/30/2014**
PMR Validation Stage: **Validated by Representative**

Chief of Operations validation date: **07/02/2014**
Division Chief validation date: **07/03/2014**
Country Representative validation date: **07/08/2014**

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

Operation Profile

Basic Data

| | | | |
|------------------------|--|-----------------------------------|------------------------------------|
| Operation name: | Potable Water and Sanitation Investment Program | Loan Number: | 1787/SF-NI |
| Executing Agency (EA): | EMPRESA NICARAGUENSE DE ACUEDUCTOS Y ALCANTARILLADOS | | |
| Team Leader: | Quille,Hubert | Sector/Subsector: | AS |
| Operation Type: | Loan Operation | Overall Stage: | Closed (All the loans are closed). |
| Lending Instrument: | Investment Loan | Country: | NICARAGUA |
| Borrower: | REPUBLICA DE NICARAGUA | Convergence related Operation(s): | |

Total Cost and Source

| | Original IDB | Current Active IDB | Local Counterpart | Co-Financing/Country | Total operation cost - Original Estimate |
|----------|-----------------|--------------------|-------------------|----------------------|--|
| NI-L1017 | \$30,000,000.00 | \$29,991,309.17 | \$600,000.00 | \$0.00 | \$30,600,000.00 |

Available Funds (US\$)

| | Current IDB | Disb. Amount to Date | % Disbursed | Undisbursed Balance |
|----------|-----------------|----------------------|-------------|---------------------|
| NI-L1017 | \$29,991,309.17 | \$29,991,309.17 | 100.00% | \$0.00 |

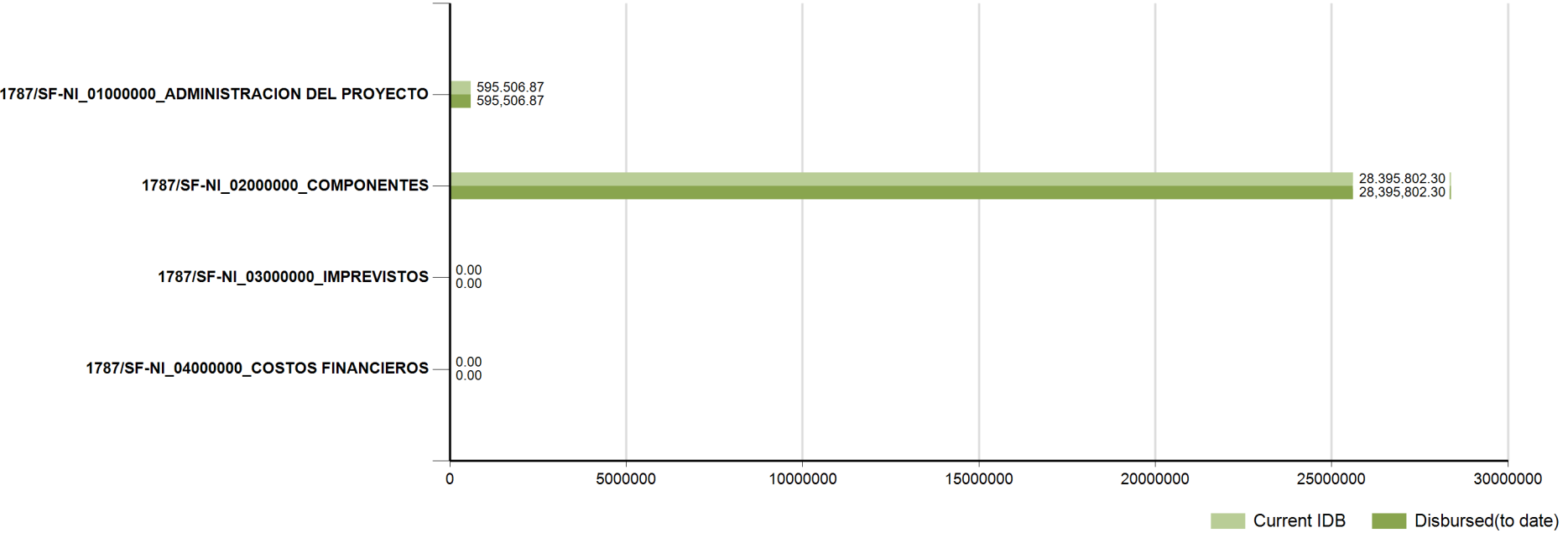
Environmental and Social Safeguards

| Main Operation | |
|---|------|
| Impacts Category: | B(R) |
| 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



No information related to this operation.

Outcomes

| Outcome: | 1 Mejorar las condiciones de vida de la población de Nicaragua mediante el mejoramiento de la gestión de ENACAL en la provision de los servicios de agua potable y saneamiento, en terminos de calidad, eficiencia, y sostenibilidad del servicio. | | | | | | | | | | | | | | |
|---|--|-----------------|----------|---------------|--|--|------|-------|-------|-----------|-------|-------|-------|-------|-----------|
| Observation: | | | | | | | | | | | | | | | |
| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | EOP | |
| 1.1 Beneficiados con AP en Managua | | personas | 0.00 | 2006 | Sistema de Monitoreo del Programa | | P | | | 41,000.00 | | | | | 41,000.00 |
| | | | | | | | P(a) | | | 41,000.00 | | | | | 41,000.00 |
| | | | | | | | A | | | 51,688.00 | 0.00 | | | | 51,688.00 |
| 1.2 Agua no Contabilizada a nivel de la Empresa | | % | 54.90 | 2006 | Informes de Auditoría Técnico-Financiera | | P | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 | | | 51.40 |
| | | | | | | | P(a) | -0.70 | -0.70 | -0.70 | -0.70 | -0.70 | -5.84 | 0.00 | 51.40 |
| | | | | | | | A | 0.00 | -0.01 | -0.05 | 0.02 | 0.05 | 0.00 | 0.09 | 55.00 |
| 1.3 Volumen de la oferta de agua en los sistemas para reducir discontinuidad del servicio | | M m3/año | 0.00 | 2006 | Sistema de Monitoreo del Programa | Los indicadores de resultado: ? Volumen de la oferta de agua en los sistemas para reducir la discontinuidad del servicio ? y ? Calidad bacteriológica mejorada, en términos de % de muestras aceptables se incrementa?, no deberán ser considerados como indicador | P | 11.10 | 15.90 | 0.00 | 0.00 | 0.00 | | | 27.00 |
| | | | | | | | P(a) | 11.10 | 15.90 | 0.00 | 0.00 | 0.00 | 7.44 | 22.00 | 0.00 |
| | | | | | | | A | 0.00 | 12.40 | 13.40 | 6.70 | 20.90 | 15.35 | 20.48 | 20.48 |

| | | | | | | | | | | | | | | | |
|---|--|---------------------------|-------|------|--|---|-------------|-------|-------|------|-----------|------------|-----------|----------|------------|
| 1.4 Calidad bacteriológica mejorada, en términos de % de Muestras aceptables se incrementa. | | | | | | Los indicadores de resultado: <input type="checkbox"/> Volumen de la oferta de agua en los sistemas para reducir la discontinuidad del servicio <input type="checkbox"/> y <input type="checkbox"/> Calidad bacteriológica mejorada, en términos de % de muestras aceptables se incrementa <input type="checkbox"/> , no deberán ser considerados como indicadores | P | 3.20 | 4.80 | 0.00 | 0.00 | 0.00 | | | 8.00 |
| | | | | | | | P(a) | 3.20 | 4.80 | 0.00 | 0.00 | 0.00 | -2.93 | 0.00 | 0.00 |
| | | | | | | | A | 0.00 | 4.00 | 3.20 | 0.25 | 0.60 | -0.90 | -1.30 | 5.85 |
| | | | | | | | | | | | | | | | |
| 1.5 Beneficiados con AS en Managua | | personas | | 2006 | | | P | | | | | 19,446.00 | | | 19,446.00 |
| | | | | | | | P(a) | | | | | 19,446.00 | | | 19,446.00 |
| | | | | | | | A | | | | | 120,878.00 | | | 120,878.00 |
| 1.6 Beneficiados con AP en ciudades intermedias | | personas | | 2006 | | | P | | | | 43,722.00 | 34,386.00 | | | 52,764.00 |
| | | | | | | | P(a) | | | | 43,722.00 | 34,386.00 | 10,212.00 | 8,202.00 | 52,764.00 |
| | | | | | | | A | | | | 18,372.00 | 16,296.00 | 5,100.00 | 2,754.00 | 42,522.00 |
| 1.7 Cobertura de costos | | Recaudo/costos admin. OYM | 0.79 | 2006 | | | P | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | | | 0.83 |
| | | | | | | | P(a) | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.52 | 0.01 | 0.83 |
| | | | | | | | A | -0.20 | 0.14 | 0.12 | -0.14 | 0.06 | -0.18 | 3.34 | 3.34 |
| 1.8 Eficiencia en la cobranza | | Recaudo/Ingresos de op. | 82.90 | 2006 | Informes de proyecto; Informes Auditoría operativa; Regulador INAA | | P | 4.10 | 0.50 | 0.50 | 0.50 | 0.50 | | | 89.00 |
| | | | | | | | P(a) | 4.10 | 0.50 | 0.50 | 0.50 | 0.50 | 3.31 | 0.50 | 89.00 |
| | | | | | | | A | 4.39 | -3.69 | 0.28 | 3.44 | 2.23 | -6.55 | 0.83 | 86.04 |

| | | | | | | | | | | | | | | | |
|---|---|-------------------|----------|------|--|--|----------|---------|---------|---------|----------|---------|--------|----------|----------|
| 1.9 Micromedicación | | % | 41.20 | 2006 | Informes de proyecto; Informes de auditoría operativa; informes Regulador INAA | | P | 3.20 | 0.60 | 1.00 | 1.00 | 1.00 | | | 48.00 |
| | P(a) | | | | | | 3.20 | 0.60 | 1.00 | 1.00 | 1.00 | 0.01 | 1.00 | 48.00 | |
| | A | | | | | | 2.80 | 7.00 | 9.00 | -1.00 | -1.00 | -8.00 | -0.03 | 49.97 | |
| | | | | | | | | | | | | | | | |
| 1.10 Costo Laboral (C \$/1000m3) | | C\$ | 2,753.00 | 2006 | Informes de Proyecto; Informes de Auditoría Operativa; Informes del Regulador INAA | | P | -242.00 | -75.00 | -126.00 | 25.00 | 43.00 | | | 2,378.00 |
| | P(a) | | | | | | -242.00 | -75.00 | -126.00 | 25.00 | 43.00 | 347.86 | | 2,378.00 | |
| | A | | | | | | -242.00 | 128.00 | -650.00 | 158.00 | 1,935.00 | -554.00 | 258.45 | 3,786.45 | |
| | | | | | | | | | | | | | | | |
| 1.11 # Empleados/100 0 suscriptores de agua | | #empl/100 0 susc. | 7.52 | 2006 | Informes de proyecto; informes auditoría operativa; informes regulador INAA | | P | -0.48 | -0.07 | -0.07 | -0.07 | -0.07 | | | 6.76 |
| | P(a) | | | | | | -0.48 | -0.07 | -0.07 | -0.07 | -0.07 | 0.17 | 0.15 | 6.76 | |
| | A | | | | | | -1.19 | 0.19 | -0.65 | -0.34 | -0.08 | 0.99 | 0.80 | 7.24 | |
| | | | | | | | | | | | | | | | |
| 1.12 Consumo de energía por unidad de producción | | kwh/m3 | 0.67 | 2006 | Informes de proyecto; informes de auditoría operativa; informes del Regulador INAA | | P | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.68 |
| | P(a) | | | | | | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | -0.79 | 0.00 | 0.68 | |
| | A | | | | | | 0.19 | -0.17 | -0.01 | -0.36 | 0.00 | 0.03 | 0.02 | | |
| | | | | | | | | | | | | | | | |
| 1.13 Inversiones propias de ENACAL en expansión en zonas pobres | | Millones C \$ | 0.00 | 2006 | Informes de proyecto; informes de auditoría opertiva; informes del Regulador INAA | | P | 16.80 | 3.20 | 5.00 | 5.00 | 0.00 | | | 30.00 |
| | P(a) | | | | | | 16.80 | 3.20 | 5.00 | 5.00 | 0.00 | 2.92 | 1.00 | 30.00 | |
| | A | | | | | | 13.14 | 5.75 | 15.68 | 4.04 | 7.94 | 14.59 | | 61.14 | |
| | | | | | | | | | | | | | | | |
| 1.14 % de mantenimiento a los activos | | % | 1.20 | 2006 | Informes de proyecto; informes de auditoría operativa; informes de Regulador INAA | | P | 0.20 | 0.03 | 0.03 | 0.03 | 0.03 | | | 1.67 |
| | P(a) | | | | | | 0.35 | 0.03 | 0.03 | 0.03 | 0.03 | 0.15 | 0.03 | 1.67 | |
| | A | | | | | | 0.20 | 0.07 | 0.38 | 0.00 | -1.00 | 3.79 | 0.01 | 4.65 | |
| | | | | | | | | | | | | | | | |
| Outcome: | 2 Mejoramiento de la calidad de vida de la población mediante el acceso a los servicios de agua potable y saneamiento | | | | | | | | | | | | | | |
| Observation: | | | | | | | | | | | | | | | |

| Indicators | Flags* | Unit of Measure | Baseline | Baseline Year | Means of verification | Observations | 2007 | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | EOP | |
|--|---|-----------------|----------|---------------|---|--------------|------|--|------|----------|----------|----------|----------|----------|----------|----------|
| | | | | | | | | | | | | | | | | |
| 2.1 Conexiones domiciliars de agua potable en cinco barrios de Managua |  RF | Hogares | 0.00 | 2006 | Sistema de monitoreo y seguimiento | | P | | | 5,458.00 | | | | | 5,458.00 | |
| | | | | | | | P(a) | | | 5,459.00 | | | | | 5,458.00 | |
| | | | | | | | A | | | 7,953.00 | | | | | 7,953.00 | |
| | | | | | | | | | | | | | | | | |
| 2.2 Conexiones domiciliars de agua potable en nueve ciudades intermedias |  RF | Hogares | 0.00 | 2006 | Sistema de monitoreo y seguimiento del proyecto | | P | | | | 7,287.00 | 5,731.00 | | | 8,794.00 | |
| | | | | | | | P(a) | | | | 7,287.00 | 5,731.00 | 1,702.00 | 1,367.00 | | 8,794.00 |
| | | | | | | | A | | | | 3,062.00 | 2,716.00 | 850.00 | 459.00 | | 7,087.00 |
| | | | | | | | | | | | | | | | | |

 RF - RF Indicator

 SI - Sector Indicator

 CI - Country Indicator

 PG - Pro-Gender

 PE - Pro-Ethnicity

Outputs: Annual Physical and Financial Progress

| Fortalecimiento Institucional de ENACAL | | Physical Progress | | | Financial Progress | | |
|--|-----------------|-------------------|------|-------|--------------------|------------|--------------|
| Outputs | Unit of Measure | 2013 | | EOP | 2013 | | EOP |
| Plan de modernización de las telecomunicaciones de ENACAL implementado | plan | P | | 1.00 | P | | 213,410.00 |
| | | P(a) | | 1.00 | P(a) | | 197,790.00 |
| | | A | | 1.00 | A | | 197,790.00 |
| Plan de Modernización Informático implementado | plan | P | | 1.00 | P | | 348,610.00 |
| | | P(a) | | 1.00 | P(a) | | 569,305.00 |
| | | A | | 1.00 | A | | 569,305.00 |
| Foro del Agua ejecutado | Foro | P | | 1.00 | P | | 9,090.00 |
| | | P(a) | | 1.00 | P(a) | | 9,090.00 |
| | | A | | 1.00 | A | | 9,090.00 |
| 13 Oficinas a nivel nacional construidas y/o rehabilitadas | Oficinas | P | | 13.00 | P | | 374,430.00 |
| | | P(a) | | 13.00 | P(a) | | 347,820.00 |
| | | A | | 13.00 | A | | 347,820.00 |
| Gerencias de Operaciones y Comercial dotadas de herramientas y equipos | dotación | P | | 2.00 | P | | 1,320,010.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 598,455.00 | 2,161,163.00 |
| | | A | 1.00 | 1.00 | A | 878,560.00 | 2,161,163.00 |
| Vehiculos adquiridos para la Gerencia de Operaciones | vehículos | P | | 6.00 | P | | 88,690.00 |
| | | P(a) | | 6.00 | P(a) | | 88,690.00 |
| | | A | | 6.00 | A | | 88,690.00 |
| Vehiculos rehabilitados para Delegaciones Departamentales | vehiculos | P | | 2.00 | P | | 12,320.00 |
| | | P(a) | | 2.00 | P(a) | | 12,320.00 |
| | | A | | 2.00 | A | | 12,320.00 |
| Sistema SCADA rehabilitado | sistema | P | | 1.00 | P | | 107,820.00 |
| | | P(a) | | 1.00 | P(a) | | 104,420.00 |
| | | A | | 1.00 | A | | 104,420.00 |
| Torres para SCADA construidas y/o rehabilitadas | torres | P | | 27.00 | P | | 43,520.00 |
| | | P(a) | | 27.00 | P(a) | | 43,520.00 |
| | | A | | 27.00 | A | | 43,520.00 |
| Programa de Rehabilitacion y Optimizacion de lo Sistemas de Agua Potable y Saneamiento | | Physical Progress | | | Financial Progress | | |
| Outputs | Unit of Measure | 2013 | | EOP | 2013 | | EOP |
| Obras de la colectora Y en Managua ejecutadas (km tubería) | km | P | | 5.40 | P | | 1,926,870.00 |
| | | P(a) | | 5.40 | P(a) | | 1,880,880.00 |
| | | A | | 5.40 | A | | 1,880,880.00 |
| Sistema de AP de la ciudad de Somotillo rehabilitado | sistema | P | | 1.00 | P | | 1,621,980.00 |
| | | P(a) | | 1.00 | P(a) | | 1,244,850.00 |
| | | A | | 1.00 | A | | 1,244,850.00 |
| Sistema AP de la ciudad de Villanueva rehabilitado | sistema | P | | 1.00 | P | | 974,610.00 |
| | | P(a) | | 1.00 | P(a) | | 806,150.00 |
| | | A | | 1.00 | A | | 806,150.00 |
| Sistema AP de la ciudad de Telica rehabilitado | sistema | P | | 1.00 | P | | 769,380.00 |
| | | P(a) | | 1.00 | P(a) | | 617,870.00 |
| | | A | | 1.00 | A | | 617,870.00 |
| Sistema AP de la ciudad de El Sauce rehabilitado | sistema | P | | 1.00 | P | | 1,270,490.00 |
| | | P(a) | | 1.00 | P(a) | | 1,166,000.00 |
| | | A | | 1.00 | A | | 1,166,000.00 |
| Sistema AP de la ciudad de La Paz Centro rehabilitado | sistema | P | | 1.00 | P | | 1,602,260.00 |
| | | P(a) | | 1.00 | P(a) | 11,540.00 | 1,308,770.00 |
| | | A | | 1.00 | A | 11,160.00 | 1,308,770.00 |

| | | | | | | | |
|--|-----------------------|-------------------|------|----------|--------------------|--------------|--------------|
| Sistema de AP de la ciudad de Nagarote rehabilitado | sistema | P | | 1.00 | P | | 2,340,900.00 |
| | | P(a) | | 1.00 | P(a) | 40,430.00 | 1,643,680.00 |
| | | A | | 1.00 | A | 41,310.00 | 1,643,680.00 |
| Sistema de AP de laciudad de San Benito rehabilitado | sistema | P | | 1.00 | P | | 953,710.00 |
| | | P(a) | | 1.00 | P(a) | | 957,912.00 |
| | | A | | 1.00 | A | | 957,912.00 |
| Sistema de AP de la ciudad de Malpaisillo rehabilitado | sistema | P | | 1.00 | P | | 938,180.00 |
| | | P(a) | | 1.00 | P(a) | | 727,210.00 |
| | | A | | 1.00 | A | | 727,210.00 |
| Sistema de AP de la ciudad de San Rafael del Sur rehabilitado | sistema | P | | 1.00 | P | | 4,364,410.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 429,658.00 | 4,716,359.00 |
| | | A | 1.00 | 1.00 | A | 513,230.00 | 4,716,359.00 |
| Sistema de AP de la ciudad de Mateare rehabilitado | sistema | P | | 1.00 | P | | 1,706,370.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 1,319,949.00 | 1,679,724.00 |
| | | A | 1.00 | 1.00 | A | 1,003,000.00 | 1,679,724.00 |
| Estudios y diseños finales de AP y AS de 9 ciudades intermedias concluidos | estudios | P | | 9.00 | P | | 514,000.00 |
| | | P(a) | | 10.00 | P(a) | 655,948.00 | 1,079,669.00 |
| | | A | | 10.00 | A | 607,270.00 | 1,079,669.00 |
| Sistema de AP de ciudad # 10 rehabilitado | sistema | P | | 0.00 | P | | 0.00 |
| | | P(a) | | 0.00 | P(a) | | 0.00 |
| | | A | | | A | | |
| Plan de Emergencia | | Physical Progress | | | Financial Progress | | |
| Outputs | Unit of Measure | | 2013 | EOP | | 2013 | EOP |
| Equipos de bombeo y eléctricos instalados | equipos | P | | 47.00 | P | | 1,911,540.00 |
| | | P(a) | | 47.00 | P(a) | | 1,911,540.00 |
| | | A | | 47.00 | A | | 1,911,540.00 |
| Obras de Emergencia en barrio de Managua Israel Galeano ejecutadas | obra | P | | 1.00 | P | | 979,170.00 |
| | | P(a) | | 1.00 | P(a) | | 979,170.00 |
| | | A | | 1.00 | A | | 979,170.00 |
| Obras de emergencia en barrio de Managua Los Corteses ejecutadas | obra | P | | 1.00 | P | | 24,950.00 |
| | | P(a) | | 1.00 | P(a) | | 24,950.00 |
| | | A | | 1.00 | A | | 24,950.00 |
| Obras de emergencia en barrio de Managua Lomas de Guadalupe ejecutadas | obra | P | | 1.00 | P | | 326,390.00 |
| | | P(a) | | 1.00 | P(a) | | 326,390.00 |
| | | A | | 1.00 | A | | 326,390.00 |
| Obras de emergencia en barrio de Managua Camilo Ortega ejecutadas | obra | P | | 1.00 | P | | 954,070.00 |
| | | P(a) | | 1.00 | P(a) | | 954,070.00 |
| | | A | | 1.00 | A | | 954,070.00 |
| Obras de emergencia en barrio de Managua 30 de Mayo ejecutadas | obra | P | | 1.00 | P | | 225,970.00 |
| | | P(a) | | 1.00 | P(a) | | 225,970.00 |
| | | A | | 1.00 | A | | 225,970.00 |
| Redes de AP rehabilitadas a nivel nacional (km) | km | P | | 2,600.00 | P | | 2,024,630.00 |
| | | P(a) | | 2,600.00 | P(a) | | 2,024,630.00 |
| | | A | | 2,600.00 | A | | 2,024,630.00 |
| Fuente de abastecimiento AP en Puerto Cabezas rehabilitada | fuente | P | | 1.00 | P | | 338,250.00 |
| | | P(a) | | 1.00 | P(a) | 130,130.00 | 440,303.00 |
| | | A | | 1.00 | A | 113,150.00 | 440,303.00 |
| Planta de tratamiento de Aguas Residuales de Rivas rehabilitada | planta de tratamiento | P | | 1.00 | P | | 43,370.00 |
| | | P(a) | | 1.00 | P(a) | | 43,370.00 |
| | | A | | 1.00 | A | | 43,370.00 |

| | | | | | | | |
|----------------------------|---------|------|------|------|------|-----------|------------|
| Campaña de sensibilización | campaña | P | | 1.00 | P | | 132,760.00 |
| | | P(a) | 1.00 | 1.00 | P(a) | 24,580.00 | 118,064.00 |
| | | A | 1.00 | 1.00 | A | 10,460.00 | 118,064.00 |

Administración, Auditoría y Evaluación, Costos
Financieros, Sin Asignación

| Other Cost | | 2013 | Cost |
|-----------------------------------|------|----------------|-----------------|
| Coordinación | P | | \$312,080.00 |
| | P(a) | \$66,250.00 | \$417,501.00 |
| | A | \$92,070.00 | \$417,501.00 |
| Auditoría Financiera y Evaluación | P | | \$287,920.00 |
| | P(a) | \$124,066.00 | \$163,856.00 |
| | A | \$123,380.00 | \$163,856.00 |
| Costos Financieros | P | | \$1,550,260.00 |
| | P(a) | \$701,848.00 | \$1,437,511.00 |
| | A | \$589,090.00 | \$1,437,511.00 |
| Sin Asignación | P | | \$2,089,260.00 |
| | P(a) | | \$49,430.00 |
| | A | | \$49,430.00 |
| Total Cost | | 2013 | Total Cost |
| | P | | \$32,701,680.00 |
| | P(a) | \$4,102,854.00 | \$30,600,121.00 |
| | A | \$3,982,680.00 | \$30,479,947.00 |

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.