

## Improvement of public health condition

### Anticipated transaction impact

Sustainable enhancement of health situation in rural communities of Nicaragua and Honduras

**Impact score** Pass (19/21)  
**Credit score** Pass (17/21)

### Loan Overview

**Commitment limit** USD 30,000  
**Tenor and structure** 18 months, monthly payments  
**Interest rate** 8.5%  
**Collateral** None  
**Guaranty** USD 7,500

### Financial Overview

**2021E Revenue** USD 830 k  
**2021 Maturing loans** USD 71 k  
**Net assets as of Dec 2020** USD 277 k

### Company Information

**Legal name** EOS International NFP  
**Founding year** 2008  
**Corporate address** Saint Paul, Minnesota  
**Nature of business** Clean drinking water solutions  
**Website** www.eosinternational.org

### Company management

Name	Nationality	Position
Wesley Meier	US	Co-founder & CEO
Gregory McGrath	US	Co-founder & Board Chair
Alvaro Rodriguez	Nicaraguan	Co-founder & Nicaragua Director
Diana Calix	Honduran	Co-founder & Honduras Director
Lisa Cook	US	Development Director

### Recommendation

Approval of a USD 30,000 term loan given the company's positive impact rating and financial stability plus a 25% personal guaranty from Gregory McGrath, Board Chairman and Co-founder.

\*Note: 2020 financials are still subject to audit

## EOS INTERNATIONAL

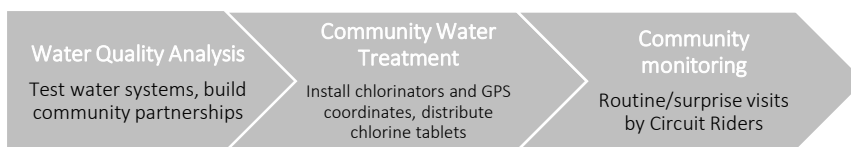
### Business overview

EOS International provides low-cost and high-impact water purifying technologies to rural communities in Nicaragua and Honduras.

Even before the COVID-19 pandemic, Nicaragua and Honduras consistently ranked as two of the poorest countries in the Western Hemisphere. While some levels of economic progress were seen over the past years, epidemic-induced lockdowns, civil unrest, and hurricanes have reversed most of the gains. With 30% of the population in Nicaragua living on less than \$2/day, and with over 60% of the population in Honduras still living in poverty, access to basic services, such as a clean drinking water, has remained very limited. Most rural Hondurans and Nicaraguans obtain water from community water systems that usually lack filtration and chlorination abilities, giving rise to waterborne disease outbreaks.

EOS follows an efficient model to provide long-term and affordable water solutions starting with the testing of the communities' drinking water source to identify potential contaminants. It then installs in-line water chlorinators that treat harmful contamination and provides training to the community so that they can monitor and manage their own water supply. EOS staff, known as the "Circuit Riders", visit these communities to provide technical assistance to communities, to deliver chlorine tablets, and to assist with water quality monitoring. Additionally, EOS has set up last-mile chlorine tablet distribution programs that provide local entrepreneurs with additional income while supporting clean water initiatives.

Figure 1: EOS' Simplified Model



Coming from a net loss in 2018, EOS grew its operations and recorded net income in 2019 of \$8.15K, which further expanded to \$76.6K in 2020\*. This was mainly achieved through sustained increase in revenues from products and services in Nicaragua and Honduras, as well as continued support from various individual donors and foundations. Notwithstanding supply issues encountered because of the pandemic, EOS sold 10,555 kg chlorine tablets in 2020 which translated to 163 new communities (or roughly 78,000 individuals) with access to safe drinking water. To date, it has reached 1,429 communities (or over 648,000 individuals) with water purifying solutions.

With the pandemic amplifying awareness in public health, EOS saw an increase in demand for chlorine tablets and chlorinator installations. With this, EOS aims to provide at least 150 more communities with sustainable access to safe drinking water this year.

### Transaction overview

To prevent recurrence of supply disruptions as occurred in 2020, to improve gross margins, and considering the foreseen increase in demand for safe drinking water solutions, EOS is seeking a loan of \$68,000 to import of 40' container of chlorine tablets (equivalent to 13,673 kg) directly from the US. Beneficial Returns has been asked to finance \$30,000 with the balance coming either from Sunrise Bank (3.5% interest rate) or World Impact Foundation (10% interest.)

Currently, EOS purchases chlorine tablets from local distributors in Nicaragua (Grupo Font) and Honduras (Tecniquimica). With the plan to purchase directly from the US manufacturer, EOS anticipates bringing down the cost to \$4.96/kg from the current average cost of \$6.33/kg.

We are proposing a \$30,000, 18-month term loan to EOS. Gregory McGrath, EOS co-founder, has personally guaranteed 25% of the principal or a maximum of \$7,500. We are obliged to pursue payment first from EOS before collecting the guaranty.

Greg sits as the chairman of EOS' board of directors. Based in the US, he held several positions in various companies such as Commercialization Specialist and Packaging System Engineer for General Mills (2010-2015), and Business Development Leader for Baldwin Technology Company (2015-2018). Currently, he works as a Sales Leader for Gartner where he started as an Account Executive in 2018. We have not reviewed his personal financial information given that his guaranty amount is modest. However, we are comfortable that he can honor his \$7,500 commitment.

### Rationale to lend

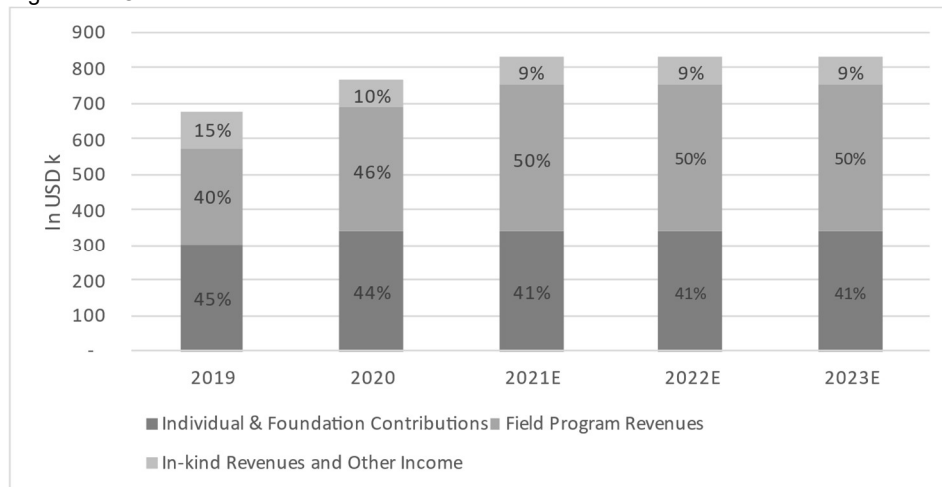
- EOS's method of intervening in the communities is notably efficient as it extends way beyond the mere provision of clean drinking water. It follows a model that ensures sustainable results through continued education and training to locals, and ongoing monitoring through its Circuit Riders and chlorine distribution centers. As such, EOS delivers a long-term reduction of waterborne diseases and improvement of public health in the communities it serves. It also provides an additional source of livelihood to local business owners through its chlorine tablet distribution program. We assess EOS' impact to be high with a score of 19 out of 21 (*See Appendix 1: EOS Impact Assessment*)
  - On the average, EOS estimates that it only costs a family approximately \$1.83/year to use their chlorine tablets. The affordability of these tablets allows even the poorest households of Nicaragua and Honduras to have access to safe drinking water.
  - The introduction of improved sanitation and chlorination of water sources have proven effective in the overall reduction of infant mortality. It is estimated that piping chlorinated water can reduce diarrhea occurrence in communities by up to 95%.<sup>1</sup> Independent studies by the Ministry of Health reported reduction of cases of waterborne diseases by 49%-61% in the communities that EOS is working.
  - The presence of Circuit Riders and chlorine tablet distribution centers form part of EOS' post-construction support to provide a sustainable supply chain of water filtration in the communities. A published study at the University of North Carolina indicated that the Circuit Rider post-construction support has been instrumental to an improved drinking water quality and overall long-term sustainability in the communities.<sup>2</sup>

<sup>1</sup>Banerjee, Abhijit, and Duflo, Esther. *Poor Economics*. PublicAffairs, 2011

<sup>2</sup>Kayser, Georgia, et al. Circuit Rider post-construction support: improvements in domestic water quality and system sustainability in El Salvador. *Journal of Water, Sanitation and Hygiene for Development*. Iwa Publishing. May 2014. <http://iwaponline.com/washdev/article-pdf/4/3/460/384962/460.pdf>

- To date, EOS has more than 50 chlorine distribution centers strategically located along main roads and surrounded by up to 15 communities that EOS serves. These centers receive training on business practices, inventory management and proper tablet handling, and can generate profit of up to \$150 per month.
- Growth in operations translates to significant improvement in profitability and continued strong financial position. We assess EOS credit standing to be adequate with a score of 17 out of 21. (See Appendix 2: EOS Credit Assessment) given our analysis of their financial standing.
  - Despite the absence of the one-off gain in 2019 from the merger with the International Rural Water Association (IRWA), EOS managed to post a 13% growth in revenue in 2020. Growth mainly stemmed from a 28% increase in field program revenues, which pertain to chlorine tablet sales and chlorinator installations in Nicaragua and Honduras. Individual and organization contributions also grew by 12%. Driven by the increase in topline and effective cost management, net income margin improved to 10% in 2020 from 1.2% in 2019.
  - Over the last few months, the Ministry of Health has requested EOS' support in providing 150 rural communities (approximately 80,000 individuals) with an improved water and hygiene system. With this, EOS is now focused on onboarding these communities, putting more emphasis on chlorine tablet sales and requiring their team to invest more time in educating the communities.

Figure 2: EOS Income Streams



- EOS sees that the direct purchase of chlorine tablets from the US manufacturer will ensure a more stable supply of chlorine tablets. It will also translate to reduced cost and improved margins.
- Key assumptions we used for EOS' forecast are as follows:
  - Monthly sales of chlorine tablets are expected to remain at 1,052kg/month. This was derived from borrower's disclosure that under the current rate of sales, the 13,673 kg of chlorine tablets to be purchased are estimated to be sold in 13 months.
  - Individual and organization contributions will remain flat. It is to be noted that EOS does not have any signed multi-year grant but foundation partners have donated multiple years in a row.

- EOS will start selling the imported tablets in the second half of 2021 and will continue to do so over the forecast period. Chlorine tablets currently cost around \$6.06/kg (Nicaragua) and \$8.99/kg (Honduras). Imported tablets from the US will cost \$4.96/kg.
- The balance of the \$68,000 funding requirement (\$38,000), which will come either from the World Impact Foundation (WIF) or their local bank, will have roughly the same terms as our proposed loan.
- The 2<sup>nd</sup> draw of PPP loan availed early 2021 is expected to be forgiven.

Figure 3: EOS Income Statement 2019-2023E (Beneficial Returns Estimate)

In USD	2019	2020	2021E	2022E	2023E
<b>Revenues</b>	<b>675,212</b>	<b>763,735</b>	<b>830,108</b>	<b>830,108</b>	<b>830,108</b>
<b>Expenses</b>					
Program Services	(571,712)	(528,386)	(580,774)	(578,838)	(576,357)
Fundraising Expenses	(83,468)	(73,593)	(73,593)	(73,593)	(73,593)
General, admin & other expenses	(11,882)	(85,126)	(85,548)	(85,986)	(86,443)
<b>Total Expenses</b>	<b>(667,062)</b>	<b>(687,105)</b>	<b>(739,914)</b>	<b>(738,417)</b>	<b>(736,392)</b>
<b>Net Income</b>	<b>8,150</b>	<b>76,630</b>	<b>90,194</b>	<b>91,691</b>	<b>93,716</b>
<b>Financial Performance Metrics</b>					
Revenue Growth Rate		13%	9%	0%	0%
Net Income Margin	1%	10%	11%	11%	11%

Figure 4: EOS Balance Sheet 2019-2023E (Beneficial Returns Estimate)

in USD	2019	2020	2021E	2022E	2023E
<b>Assets</b>					
Cash	96,681	271,609	345,753	391,240	482,147
Other Current Assets	78,291	171,394	170,199	169,004	169,004
Noncurrent Assets	60,157	12,691	11,463	10,235	9,007
<b>Total Assets</b>	<b>235,129</b>	<b>455,694</b>	<b>527,415</b>	<b>570,479</b>	<b>660,158</b>
<b>Liabilities and Net Assets</b>					
Current Liabilities	25,505	157,949	156,183	111,566	107,528
Non-current Liabilities	50,000	20,716	4,009	-	-
Total Liabilities	75,505	178,665	160,192	111,566	107,528
Net Assets	159,624	277,029	367,223	458,914	552,630
<b>Total Liabilities and Net Assets</b>	<b>235,129</b>	<b>455,694</b>	<b>527,415</b>	<b>570,479</b>	<b>660,158</b>
<b>Financial Position Metrics</b>					
Debt Service Coverage (DSCR)		24.96	1.29	1.87	23.50
Debt-Equity (D/E)	0.47	0.64	0.44	0.24	0.19
Current Ratio	6.86	2.48	3.30	5.02	6.06

- EOS is expected to continue to generate positive earnings as it scales operations to reach more communities in the coming years. The plan to acquire chlorine tablets directly from the US is expected to reduce cost and will complement expansion of revenues. Cost savings will commence in 2021 and forecasted to fully materialize in 2022 with net margin improving further to 11%.
- EOS balance sheet structure has been satisfactory with most of its capital derived from equity. In 2020, it has comfortably serviced interest expenses on outstanding debt obligations and managed to expand cash reserve to \$272K, up by almost 181% from the previous year.

- Moving forward, we estimate that EOS will have sufficient cash to cover debt service on maturing obligations for the next two years. This includes existing obligations related to the Delta Fund and Ross Family Loans, and proposed term loans related to the acquisition of chlorine tablets from the US (which will be partly funded by Beneficial Returns). Liquidity and leverage position will also remain satisfactory.
- We recognize that EOS' positive earnings and debt service capacity are partly hinged on donor contributions, which accounted for 44% of revenues in 2020. Nevertheless, our break-even analysis indicates that donor contributions can decline by 13%-27% over the next two years and EOS can still cover debt obligations while maintaining stable cash level.

Figure 4: Break-even analysis of individual and foundation contributions

In USD	2021E	2022E	2023E
<b>Individual and foundation contributions</b>			
Beneficial Returns Projections	338,752	338,752	338,752
Break-even	264,608	293,265	247,846
<i>Margin of safety (%)</i>	22%	13%	27%

## Major risks and mitigating factors

Risk	Risk factor	Probability	Risk mitigating factor
Inability to sustain profitable operations	Failure to reach more communities due to political instability (noting the upcoming presidential elections)	Low	<ul style="list-style-type: none"> <li>EOS partners mainly with the Ministry of Health, focusing on public health improvement while remaining politically neutral. Should a major political unrest occur, an action plan is also in place to temporarily modify operations and continue providing services.</li> <li>We highlight that EOS is backed by more than a decade of experience in effectively navigating the political landscape of Nicaragua and Honduras.</li> </ul>
	Failure to deliver products and services due to travel impediments (from weather disturbances or the ongoing pandemic)	Moderate	<ul style="list-style-type: none"> <li>EOS is pursuing purchase of bulk chlorine tablets directly from a US manufacturer that will ensure supply for the next 13 months. It intends to continue purchasing from this new supplier moving forward.</li> <li>EOS can alternatively source chlorine tablets from current local distributors in Nicaragua and Honduras.</li> </ul>
	Inability to sustain revenue from donor contributions	Low	<ul style="list-style-type: none"> <li>Individual and foundation partners' continued support is evident through historical contributions to EOS. We have no reason to believe that this support will cease in the future.</li> <li>For the past two years, no single donor has accounted for more than 12% of total contributions, tempering donor concentration risk</li> </ul>

Failure to secure funding to support inventory

Inability to draw loans from WIF/ local bank      Moderate

- EOS has an existing relationship with World Impact Foundation through the Delta Fund Loan that historically supported working capital requirements. We believe EOS has a good chance of tapping WIF again for capital requirements.
- We highlight sufficient cash level can provide a leeway in case EOS will be unable to secure loan.

### Conclusion

We recommend extending a loan of USD 30,000 to EOS International noting strong impact score and adequate credit score. This loan is supported by a 25% guaranty by Gregory McGrath.

We note that the potential political unrest in Nicaragua and Honduras and travel challenges from calamities and pandemic-induced restrictions are major risks to EOS' operations. Nonetheless, EOS has shown capability of managing these risks with over a decade of working experience in Central America. Partnering mainly with the Ministry of Health, EOS has also consciously remained politically unaffiliated. The inability to source capital to fund inventory will impede chlorine tablet supply chains to both existing and target rural communities. We believe that EOS has a satisfactory relationship with several partners whom they can draw capital.

## Appendix 1: EOS International Impact Assessment

## Impact score: 19 out of 21

Prospective borrowers are rated with 1 point for Low, 2 points for Moderate and 3 points for High. Minimum score of 15 for approval.

	Low	Moderate	High	Score
<b>1 SCALE</b> Is the social enterprise addressing a major social or environmental problem and do they have the capacity to make a measurable, positive difference themselves or by influencing others?			✓	3
<b>2 SYSTEMIC CHANGE</b> Is the social enterprise focused on systemic change? In other words, would the impact continue even if the social enterprise went out of business?			✓	3
<b>3 SUSTAINABILITY</b> Does the social enterprise have a business model that is or has a strong likelihood of being sustainable? This may include a portion of philanthropic revenue provided that is sustainable.			✓	3
<b>4 STAKEHOLDER ENGAGEMENT</b> Does the social enterprise engage all stakeholders in their work? Is the social enterprise building local, human resources? Does it actively share its insights with others? Are indigenous communities involved?			✓	3
<b>5 RIGOR</b> How does the social enterprise measure its own impact and how well is it doing against these metrics?		✓		2
<b>6 EFFICIENCY</b> Are the social enterprise's impact outcomes cost efficient vs. other interventions? If not, is it likely that they will become so as the social enterprise grows?		✓		2
<b>7 INTENTION</b> How committed to its social or environmental mission is the social enterprise?			✓	3
<b>TOTAL</b>				<b>19</b>

## Appendix 2: EOS International Credit Assessment

## Credit score: 17 of 21

Prospective borrowers are rated with 1 point for Low, 2 points for Moderate and 3 points for High. Minimum score of 15 for approval.

	Low	Moderate	High	Score
<b>1 BELIEF IN MANAGEMENT</b> Does the social enterprise have a strong management team (extensive industry experience, strong leadership and entrepreneurial background)? Is the governance structure adequate?			✓	3
<b>2 ACCOMMODATIVE BUSINESS ENVIRONMENT</b> Is the social enterprise operating in an industry with low level of competition? Does the social enterprise provide products or services that have low threat of substitution?		✓		2
<b>3 QUALITY OF FINANCIAL INFORMATION</b> Can the financial information provided be depended on? Has its financial statements been audited?		✓		2
<b>4 ABILITY TO BE PROFITABLE</b> Does the social enterprise have a positive earnings trend? Are the earnings sustainable?		✓		2
<b>5 STRENGTH OF FINANCIAL POSITION</b> Does the social enterprise maintain adequate financial ratios (DSCR, Debt-to-equity, Current ratio) to support a debt obligation?			✓	3
<b>6 ABILITY TO SERVICE DEBT</b> Does the social enterprise have the ability to establish a strong cash position to meet its debt obligations on time?			✓	3
<b>7 COLLATERAL OR GUARANTEES</b> Is there collateral for the loan with an adequate loan-to-value amount? Is there a guarantor for the loan?		✓		2
<b>TOTAL</b>				<b>17</b>



Appendix 3: Photos of Impact of EOS International

