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Advancing Conservation with Innovative Finance

The Amazon Region Protected Areas (ARPA) initiative is an ambitious vision to safeguard millions of acres of Amazon rainforest. This vision holds tremendous significance for the environmental future of the entire planet.

ARPA was launched in 2002, and we made important progress to safeguard large swaths of the Amazon during our first decade of work. In 2014, we took steps to ensure the long-range financial stability of this bold endeavor by establishing ARPA for Life.

ARPA for Life is a model borrowed from the world of finance that ensures permanent funding of ARPA’s conservation work in 15% of the Brazilian Amazon—an area 1.5 times the size of California or roughly the size of France.

In these pages, we are pleased to report on the progress of both the ARPA for Life financial package, now four years after closing, and on the ARPA conservation program this financing makes possible, currently in its third major phase of work.
Executive Summary

2017-18 HIGHLIGHTS

- In August 2017, three federal Amazon protected areas were brought into ARPA: Pacaás Novos National Park, Monte Roraima National Park, and Guaporé Biological Reserve. The addition of these three protected areas means ARPA now encompasses 117 protected areas covering 60.8 million hectares, which exceeds our 60-million-hectare target.

- In May 2018, the law specifying the regulations for the application of environmental compensation resources to Brazilian protected areas was finally approved. The new law will unlock up to R$1.4 billion for the Chico Mendes Institute for Biodiversity Conservation to use for protected areas in Brazil.

- In April 2018, the Temer administration nominated Cairo Tavares, a politician belonging to an anti-environment ruralista party, to be the next President of the Chico Mendes Institute for Biodiversity Conservation. Following widespread outcry and a formal appeal from leadership within the environmental community, the government withdrew the nomination and instead appointed Paulo Carneiro, Director of the Department for the Creation and Management of Protected Areas, whose appointment was welcomed.

2017-18 CHALLENGES

- In August 2017, President Temer issued a decree abolishing RENCA (National Reserve of Copper and Associated Minerals), a 4.7-million-hectare area in the northern Amazon that had been off-limits to commercial mining since 1984. WWF, in partnership with fellow environmental organizations, mounted a campaign against the change, and just over a month later, under increasing domestic and international pressure as well as challenges from the courts, the government suspended the decree.

- In March 2018, the governor of Rondonia created 11 new state protected areas. Unfortunately, the state legislature revoked these protections soon after, and enacted a law and a constitutional amendment preventing the creation of new protected areas. The Governor petitioned the State Supreme Court to declare the legislature’s actions unconstitutional. In July 2018, the court preliminarily ruled that the actions of the legislature were unconstitutional; a final ruling is expected by early 2019.

- The October 2018 elections in Brazil will represent a critical inflection point for the future of conservation in the Amazon. The outcome will determine whether we spend the next four years defending hard-won gains, or whether we can continue to make advances in the conservation and sustainable use of the richest repository of biological diversity and ecosystem services on the planet.
In 1998, in response to growing concerns about the future of tropical rainforests and a request from WWF’s Forests for Life Campaign, the Government of Brazil pledged to formally protect at least 10% of the Brazilian Amazon. The ARPA Program was created to embody this pledge as an historic public-private partnership designed to strengthen and expand the wilderness protected areas of the Brazilian Amazon. **ARPA’s mission is to secure long-term protection for an ecologically representative sample of the Brazilian Amazon** in a system of well-managed parks and reserves, while also helping to meet the needs of communities in the region.

Since ARPA was launched at the World Conference on Sustainable Development in 2002 (Rio +10), it has become the most successful protected area creation program in history. By June 2018, ARPA had promoted the designation of more than 28 million hectares (almost 70 million acres) of new protected areas and was also supporting the consolidation of more than 60 million hectares of protected areas. Many of these protected areas had been "paper parks" without effective management structures in place—until ARPA. In addition to these achievements, ARPA has inspired significant conservation planning and capacity upgrades that are improving the management of protected areas across Brazil’s Amazon region. Maps (next page) comparing Brazilian Amazon protected areas before ARPA in 2000, and today in 2018, illustrate the profound impact ARPA has had on protected areas in the Brazilian Amazon.

The system of protected areas implemented through ARPA is delivering critical benefits, protecting key habitats and biodiversity previously absent or underrepresented in the Brazilian protected area system, and contributing to the maintenance of ecological processes and environmental services throughout the Amazon.

Please find a full-page version of this infographic in Appendix 4.
REDUCED CARBON EMISSIONS

ARPA is also contributing to significant reductions in carbon emissions. A study by Britaldo Soares, et al. (*Reducing Carbon Emissions from Deforestation: The Role of ARPA’s Protected Areas in the Brazilian Amazon, 2008*) estimated that the expansion of protected areas created under ARPA from 2003-2008 alone will, by 2050, reduce deforestation by 68,000 square miles, thereby avoiding emissions of 5.1 billion tons of CO$_2$ into the atmosphere. For purposes of comparison, this figure represents close to 16% of global CO$_2$ emissions per year.

An updated study of ARPA’s impact on carbon emissions examined the new areas created and incorporated into ARPA since 2008. The study found that of the 1.5 billion tons of carbon emissions avoided due to Amazon protected areas during the period 2005 to 2015, 25% resulted from ARPA-supported territory. This reduction is roughly equivalent to the total amount of carbon emissions generated annually by motorized transportation worldwide.

Please find a full-page version of this graphic at the end of this document in Appendix 4.
In 2010, WWF began a process to update ARPA’s financial plan. The updated financial model, completed at the end of 2010 and based on actual expenditures over the life of the ARPA program to date, indicated that the program faced a serious future funding gap. Even including significant contributions from the World Bank’s Global Environment Facility and the German Development Bank, existing funding sources were deemed to cover only about 60% of the $300 million the project needed through 2020, when new protected area creation and consolidation will be complete. Additionally, projected annual funding sources would have provided less than 40% of the approximately $45 million in annual operating costs needed to cover ARPA’s recurrent costs from 2020 onward.

The financial model also showed that any potential endowment to fund the recurrent costs of the entire ARPA system, as originally envisioned, would need to be enormous. On one hand, the development of financial mechanisms related to environmental compensation for infrastructure development and payment for ecosystem services, such as carbon and water—coupled with Brazil’s growing economy—meant it would be reasonable to expect the Government of Brazil, over time, to assume an increasing percentage of the costs of maintaining ARPA. But, even assuming that the Brazilian government would gradually increase its contribution to ARPA from $16 million a year to $33 million a year by 2020 and $44 million by 2038—drawing on governmental budgetary appropriations, compensation funds, payment for ecosystem services mechanisms, or other sources—there would be a need for roughly $215 million in one-time contributions to cover ARPA’s costs until a full transition to government funding could take place.

So, in response to this singular need, WWF and a group of partners forged a deal to secure the future of ARPA through a new financial plan dubbed ARPA for Life. Under this agreement, public and private funders came together with the Government of Brazil to sign a memorandum of understanding pledging to secure more than 60 million hectares (roughly 150 million acres) of Brazil’s Amazon rainforest in perpetuity. This agreement ensured that sufficient funds will be available to cover the recurrent costs of ARPA for the next 25 years, provided that the Government of Brazil meets the disbursement conditions outlined in the agreement.

ARPA for Life is a groundbreaking achievement on behalf of conservation, made possible through the vision and philanthropic contribution of many trusted supporters. With its built-in support for capitalization of the Transition Fund and operating costs, this innovative conservation funding mechanism is already proving to be successful, despite shifting political and economic circumstances in Brazil. By implementing a long-term sinking fund, the Government of Brazil has the necessary time to prepare to assume full management of its protected area funding. These initial years will be critical to: 1) secure the funds that have been committed and oversee the initial operations of the Transition Fund, and 2) build the capacity of key stakeholders to ensure the institutional and ecological sustainability of the ARPA system.
On May 21, 2014, project partners determined that the closing conditions for *ARPA for Life* were met, and a memorandum of understanding was signed, detailing the commitments of the respective parties.

Since closing, WWF has focused on two major objectives: 1) to secure the funds committed, and oversee the successful launch of the Transition Fund, and 2) to build the capacity of key stakeholders to ensure the institutional and ecological sustainability of the ARPA system.

**COMPLETING TRANSITION FUND CAPITALIZATION**

At closing, the grant agreements for transfer of the private donors’ funds from WWF-US to WWF-Brazil and from WWF-Brazil to Funbio (the Brazilian Biodiversity Fund), as manager of the Transition Fund, were signed. Commitments by other major donors—including the Global Environment Facility, the German Development Bank, and the Amazon Fund—were pledged at closing and required follow-up to formally secure. A table showing *ARPA for Life* donors and their contributions is included on the following page.

As of March 2018, Anglo-American disbursed the first $2.5 million of its $5 million pledge. The new Global Environment Facility project, which includes a $30 million contribution to the Transition Fund, was signed in December 2017. This contribution will be paid out over the next four years in three installments of $10 million each. Disbursement conditions that will trigger these payments include the approval of ARPA’s Amazon Fund proposal and the commitment of federal environmental compensation funding to at least one ARPA protected area. And, as reported last year, as of July 2017, WWF disbursed the full amount of its commitment: $8 million from the Margaret A. Cargill Foundation, and $22 million from the Gordon and Betty Moore Foundation, the Bobolink Foundation, and additional individual donors.

The sole outstanding donor commitment agreed upon at closing is the Amazon Fund’s contribution. Since the Brazilian Development Bank declined to direct their contribution to the Transition Fund, we are pursuing an alternate strategy to secure these promised funds. To that end, we are currently preparing a three-year project proposal for R$70 million to cover the costs of managing all the federal protected areas within ARPA. This contribution will also support costs not covered by the Transition Fund related to the integrated management of protected area mosaics, community natural resource management in sustainable use protected areas, and communications. Of the total proposed project budget, approximately R$54 million would offset the costs of ARPA federal protected areas that would otherwise have come from the Transition Fund. Financial execution of these Amazon Fund resources will be tracked separately but will count toward the Transition Fund goal and be likewise tied to the agreed upon ARPA indicators. A second three-year project is envisioned to follow the completion of this first project.
<table>
<thead>
<tr>
<th>DONOR</th>
<th>Cash Value (USD) in Year Funds Delivered</th>
<th>Cash Value (USD) in 2014 (5% discount rate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current ARPA Endowment</td>
<td>$60,000,000</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>Government of Germany</td>
<td>$40,000,000</td>
<td>$39,000,000</td>
</tr>
<tr>
<td>Amazon Fund (Brazilian Development Bank)</td>
<td>$40,000,000</td>
<td>$35,000,000</td>
</tr>
<tr>
<td>Global Environment Facility</td>
<td>$30,000,000</td>
<td>$27,000,000</td>
</tr>
<tr>
<td>Roger &amp; Vicki Sant Trust (via WWF)</td>
<td>$25,000,000</td>
<td>$14,000,000</td>
</tr>
<tr>
<td>Gordon &amp; Betty Moore Foundation</td>
<td>$15,000,000</td>
<td>$14,000,000</td>
</tr>
<tr>
<td>Margaret A. Cargill Foundation</td>
<td>$8,000,000</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Bobolink Foundation</td>
<td>$4,000,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Inter-American Development Bank</td>
<td>$3,000,000</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Joseph and Carson Gleberman</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Linden Trust for Conservation</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Anonymous</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Brazilian Private Donors</td>
<td>$210,000</td>
<td>$210,000</td>
</tr>
<tr>
<td>Anglo-American</td>
<td>$5,000,000</td>
<td>$4,500,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$210,710,000</strong></td>
<td><strong>$210,710,000</strong></td>
</tr>
<tr>
<td><strong>Original Target</strong></td>
<td></td>
<td><strong>$215,000,000</strong></td>
</tr>
</tbody>
</table>

1 The WWF contribution from the Roger and Vicki Sant Trust is not expected until later in the life of the Transition Fund.

2 The Inter-American Development Bank contribution is not held within the Transition Fund but is being used to offset $3 M in expenses that would otherwise be charged to the Transition Fund.

3 Although the total secured and committed is slightly below the original target, additional donations are still possible.

4 Due to the dramatic appreciation of the US dollar against the Brazilian real since 2014, there are now substantially more funds available for expenses in the local currency.
MAKING THE TRANSITION FUND OPERATIONAL

Since closing, the Transition Fund Committee, made up of representatives from the donor institutions and representatives of the Government of Brazil, has been convened on a quarterly basis by Funbio, which serves as Secretariat of the Committee. The most important roles of the Committee are to: 1) review the status of the disbursement conditions on a regular basis; 2) approve the bi-annual disbursements from the Transition Fund; and 3) oversee effective fund management.

After serving two consecutive two-year terms, Paulo Sodre stepped down as President of the Committee following the June 2018 meeting. Sodre will continue to follow ARPA’s progress closely as President of WWF-Brazil’s Board. The new President of the Transition Fund Committee and representative of WWF-Brazil is Luis Semighini de Souza. He is an experienced project finance lawyer who has been involved with WWF-Brazil for a decade, first in a pro-bono capacity and subsequently, as a member of its Board.

As de Souza assumes this leadership position, Avecita Chicchon, representing the Gordon and Betty Moore Foundation, will continue as Vice-President of the Committee. Meg Symington, senior director on the forest team, represents WWF-US on the Transition Fund Committee. Anglo-American currently fills the seat for corporate donors, and the German Development Bank and the Global Environment Facility are also represented on the Committee. The final donor seat remains vacant pending a decision by the Brazilian Development Bank/Amazon Fund on their support (see page 10). The Government of Brazil also has two representatives on the Committee: the Director of Protected Areas from the Ministry of Environment and Marcelo Moises de Paula, the head of the Department of External Finance from the Ministry of Planning.

MONITORING DISBURSEMENT CONDITIONS

Eleven disbursement conditions were agreed upon as part of ARPA for Life to provide an incentive for Government of Brazil delivery on issues critical to ARPA implementation. Performance against these conditions influences disbursements from the Transition Fund according to a formula defined in the ARPA Operational Manual. In November 2015, when the biennial disbursement for 2016-2017 was made, all but two of the conditions were deemed to have been met. The Ministry of Environment and Funbio provide the Committee with updates on the status of the conditions on a quarterly basis. The conditions were formally assessed at the Committee meeting in August 2017 to determine the amount of the 2017-2018 biennial disbursement from the Transition Fund. The table on the following page provides an update on the status of compliance with the disbursement conditions as of June 2018.
<table>
<thead>
<tr>
<th>#</th>
<th>DISBURSEMENT CONDITION</th>
<th>STATUS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Program operation manual aligned with ARPA goals</td>
<td>Green</td>
<td>The program operation manual has been updated to include the new ARPA Protected Area list and the new presidential decree.</td>
</tr>
<tr>
<td>2</td>
<td>No net loss of protected areas within ARPA</td>
<td>Green</td>
<td>There has been a net increase.</td>
</tr>
<tr>
<td>3</td>
<td>Protected Area Financial Reports</td>
<td>Green</td>
<td>All of the ARPA Management Agencies (Chico Mendes Institute for Biodiversity Conservation and state agencies) submitted the required reports.</td>
</tr>
<tr>
<td>4</td>
<td>Consolidation Plans</td>
<td>Green</td>
<td>Chico Mendes Institute for Biodiversity Conservation’s Consolidation Plan was presented in 2013, and the state management agencies completed theirs in 2015.</td>
</tr>
<tr>
<td>5</td>
<td>Additional donor resources secured as pledged by Government of Brazil</td>
<td>Yellow</td>
<td>Global Environment Facility funding on track; disbursements to Transition Fund expected to begin in late 2018; expected funding from Amazon Fund continues to be delayed; now expected in 2019.</td>
</tr>
<tr>
<td>6</td>
<td>Chico Mendes Institute for Biodiversity Conservation 2014 Budget increase</td>
<td>Green</td>
<td>R$17 million approved in 2014 and executed in 2015.</td>
</tr>
<tr>
<td>7</td>
<td>Biodiversity Monitoring implemented</td>
<td>Green</td>
<td>Basic biodiversity monitoring protocols have been implemented in all ARPA protected areas.</td>
</tr>
<tr>
<td>8</td>
<td>New Protected Area Creation</td>
<td>Red</td>
<td>Creation of the additional 3 million hectares of new protected areas needed to meet the disbursement condition target of 6 million hectares was not achieved.</td>
</tr>
<tr>
<td>9</td>
<td>Increase in non-salary government funding</td>
<td>Green</td>
<td>Although progress and trajectory vary among the state agencies and Chico Mendes Institute for Biodiversity Conservation, all management authorities demonstrated the increases needed in 2018.</td>
</tr>
<tr>
<td>10</td>
<td>Consolidation Performance</td>
<td>Yellow</td>
<td>Staffing and capacity constraints at the protected area level have delayed consolidation at some protected areas. 100% of ARPA protected areas are scheduled to be consolidated by the end of the 2018-2019 biennium, but this seems unlikely to be achieved.</td>
</tr>
<tr>
<td>11</td>
<td>Protected Area Staffing</td>
<td>Yellow</td>
<td>Chico Mendes Institute for Biodiversity Conservation, Amazonas and Rondonia did not achieve protected area staffing targets by the end of 2017.</td>
</tr>
</tbody>
</table>
TRANSITION FUND DISBURSEMENTS 2018-2019

As of April 2017, ARPA Phase 2 funding ended and all 117 ARPA protected areas began to receive funding from the Transition Fund, regardless of their consolidation status. In August 2017, the Committee met to approve the amount to be disbursed for the 2018-2019 biennium.

Two disbursement conditions were only partially met: Condition 8 requiring the creation of 6 million hectares of new protected areas by 2018—only 3 million hectares were created—and Condition 11 establishing protected area staffing targets—Chico Mendes Institute for Biodiversity Conservation, Amazonas and Rondonia did not meet protected area staffing targets. Following a lengthy discussion, the Committee voted to withhold application of the new protected area creation condition until the Committee meeting of June 2018, given the large number of protected area creation processes in the pipeline. The penalty for not meeting the protected area staffing target was applied, and the total amount approved for disbursement for the 2018-2019 biennium was R$124,062,812 (USD $30,041,810 at today’s exchange rate), reflecting a penalty of 3.5% for failure to meet staffing targets under Condition 11.

At its June 2018 meeting, the Committee voted to extend the deadline for new protected area creation under disbursement Condition 8 to the end of 2019, to allow for the new protected area creation processes underway to come to fruition. On June 5, World Environment Day, one such process culminated as the Government of Brazil announced the creation of Baixo Rio Branco-Jauaperi Extractive Reserve, in the states of Roraima and Amazonas, bringing the total new protected area creation under ARPA for Life to 3 million hectares. If new protected area creation does not reach the 6-million-hectare target by the time of the next disbursement decision at the end of 2019, the penalty will be applied. Two other changes to the disbursement conditions were approved during this meeting: 1) updating Condition 2 prohibiting net loss of protected areas within ARPA to reflect ARPA’s new baseline of 60.8 million hectares, and 2) eliminating Condition 6, related to Chico Mendes Institute for Biodiversity Conservation’s 2014 budget increase, since it was met in 2015 and no longer requires periodic re-evaluation. Accordingly, future reports will track the ten remaining disbursement conditions.

TRANSITION FUND MANAGEMENT

The Transition Fund disbursed a total of R$48.6 million to ARPA areas between the initiation of the fund in September 2014 and March 31, 2018. Given that disbursements as of March 31, 2017 totaled R$14.4 million, this represents a major increase in monthly disbursements since the Transition Fund now supports all 117 ARPA areas. This increase in the number of requests for goods and services from the protected areas has driven Funbio and the Ministry of the Environment to improve processes and procedures. Improvements include the development of a new online purchasing platform. Funbio has also hired additional staff to help handle purchases and opened an office in Brasilia to facilitate better coordination with the Ministry of the Environment. As of March 31, 2018, total assets held in the Transition Fund were R$415 million with 30% of the assets invested locally and 70% held offshore. The annual yield on funds held in Brazil and internationally were 2.2% and -1.6% respectively, neither meeting the 3% target established in the Transition Fund Investment Policy. In July, Julius Baer & Co. was selected as the new international asset manager; Pragma will continue to manage the assets held within Brazil.
- Average disbursement since mid-2017 exceeds R$3.5 million per month.
- Reflects overall trend of continual growth from 2014-2018, with steep increase in mid-2017 when all 117 protected areas began receiving support from the Transition Fund.
ARPA Phase III Implementation

ARPA SYSTEM SURPASSES 60 MILLION HECTARE TARGET

In August 2017, three federal Amazon protected areas were brought into ARPA: Pacaás Novos National Park (764,801 hectares), Monte Roraima National Park (116,748 hectares), and Guaporé Biological Reserve (615,771 hectares). These areas were selected based on how they would contribute to ARPA’s representation of different habitats and ecosystems within the Brazilian Amazon, their level of consolidation, and their priority as indicated by the Chico Mendes Institute for Biodiversity Conservation. The addition of these three protected areas means ARPA now encompasses 117 protected areas covering 60.8 million hectares, which exceeds our 60-million-hectare target. Of these protected areas, 57 belong to strict conservation categories—national parks, biological reserves, and ecological stations—and 60 belong to sustainable use categories, such as extractive reserves and sustainable development reserves. Seventy-two of the protected areas are federal areas managed by the Chico Mendes Institute for Biodiversity Conservation and 45 are managed by state environmental agencies. Please find a map and list of these 117 protected areas in Appendix 2.

Mais de

60 MILHÕES DE HECTARES PROTEGIDOS
PROVIDING TECHNICAL ASSISTANCE AND SUPPORT

ARPA implementation is broken down into three major stages: Stage 1 [2002-2009] when focus was primarily on the creation of new protected areas; Stage 2 [2010-2017], with a focus on the consolidation of the protected areas within the ARPA system; and Stage 3 [2014-2037], the period covered by the ARPA for Life financial plan and a transition to 100% funding by the Government of Brazil. A major focus of WWF’s post-closing support to ARPA for Life is ensuring that the institutions responsible for ARPA have the capacity to meet the disbursement conditions of the Transition Fund. WWF engages on a regular basis with Brazil’s Ministry of Environment, the Chico Mendes Institute for Biodiversity Conservation, and state governments as they work to effectively implement ARPA’s new financial plan.

GOVERNMENT TRANSITIONS IN 2018

Brazil will hold presidential, congressional, and state elections this October. Cabinet ministers are required to resign their posts in advance of these elections if they are planning on running for office. Accordingly, Environment Minister Sarney resigned in April and was replaced by Edson Duarte, who will serve as minister through the remainder of the Temer administration.

In April, Ricardo Soavinski stepped down as President of the Chico Mendes Institute for Biodiversity Conservation. The Temer administration nominated Cairo Tavares, a politician belonging to an anti-environment ruralista party, to fill the vacated post. Since this position was not traditionally a sought-after political post, there was speculation that the post became attractive following approval of a measure that will allocate environmental compensation resources totaling R$1.4 billion to the Chico Mendes Institute for Biodiversity Conservation. His nomination triggered an outcry from Institute employees and a letter protesting the nomination signed by six former environment ministers, after which the government withdrew the nomination and appointed Paulo Carneiro, Director of the Department for the Creation and Management of Protected Areas to be the new President. Carneiro has represented Chico Mendes Institute for Biodiversity Conservation on the Transition Fund Committee for the last two years and his appointment to the role was welcomed by the environmental community.

GOVERNMENT PROPOSALS THREATEN PROTECTED AREAS

Following last year’s attempt to degazette a portion of Jamanxim National Park, government actions threatening Amazon protected areas have persisted. These actions represent a pressing threat to the conservation of Brazilian biodiversity, and to the long-term sustainability of financial investments made by foundations, multilateral cooperation agencies, and other donors to programs supporting protected areas, including ARPA.
In August 2017, President Temer issued a decree abolishing RENCA (National Reserve of Copper and Associated Minerals), a 4.7-million-hectare area in the northern Amazon that had been off-limits to commercial mining since 1984. Had this decree remained unchallenged, an influx of large-scale commercial mining would have inflicted massive detrimental social and environmental damage on the nine protected areas and two indigenous territories in the reserve. WWF, in partnership with fellow environmental organizations, mounted a campaign against the change, and just over a month later, under increasing domestic and international pressure and challenges from the courts, the government suspended the decree.

In March 2018, we witnessed some hopeful progress, followed by a disappointing setback in the state of Rondonia. On March 20, the governor of Rondonia signed decrees creating 11 new state protected areas totaling 537,000 hectares, including four protected areas with ARPA-sponsored studies. Unfortunately, a week later, the Rondonia state legislature revoked these protections, and enacted a law and a constitutional amendment preventing the creation of new protected areas. Before leaving office to run for Senate, the Governor countered this move by the legislature, bringing a case before the State Supreme Court petitioning to declare the legislature’s actions unconstitutional. WWF supported this effort, helping local civil society organizations to prepare a technical analysis of the case and disseminate this information to key stakeholders. On July 9, the court issued a promising preliminary judgement, ruling the actions of the state legislature were unconstitutional. However, the preliminary ruling has since been appealed, and we are monitoring the situation; a final judgement is expected by early 2019.
This threat of governmental action against protected areas is a persistent challenge to the future of ARPA. There are at least five dozen bills or legislative decrees currently under consideration in the Brazilian National Congress or State Legislative Assemblies that could result in protected area degazettement, downsizing, and downgrading (PADDD) cases. WWF is creating a dynamic Brazilian version of the PADDDtracker website in Portuguese that will map protected area degazettement, downsizing, and downgrading events in the Brazilian Amazon together with the socio-economic drivers of these events, including deforestation, presence of mining licenses, existence of roads and other infrastructure. The information will be used to assess the vulnerability of specific areas to future protected area degazettement, downsizing, and downgrading efforts and improve our ability to advocate against them. As we continue to monitor these proposals and analyze the political and economic drivers that predict the vulnerability of specific protected areas, we will also publish our findings—as policy briefs in many cases—and disseminate them to key decisionmakers, raising public awareness of the threat to Brazil’s protected areas.

INCORPORATING TECHNOLOGY INTO PROTECTED AREA PLANNING, MONITORING, AND EVALUATION

Innovative integrated monitoring technologies are key to large-scale protected area management. We have made great strides in this area, as we reported last year in our analysis of the Rapid Assessment and Prioritization of Protected Area Management results from 2005-2015. However, accurately monitoring and protecting biodiversity are persistent challenges to achieving full consolidation in ARPA protected areas.

To achieve our long-term goals, we need to be able to effectively monitor important indicators such as changes in land use and land cover, biodiversity, on-the-ground threats, and the efficacy of enforcement efforts. Using new technologies can improve our detection of biodiversity disturbances and responses in tropical forests, which are traditionally challenging habitats for data collection. The integration of these new technologies can also increase the detail and accuracy of our biodiversity monitoring—especially if they are used to empower local communities to monitor and conserve the forest resources on which they rely.

To that end, in 2017, WWF began trials of three new monitoring techniques within ARPA protected areas: 1) the use of unmanned aerial vehicles to monitor forest degradation and map important resources like Brazil nuts and rubber; 2) the use of mobile devices and SMART (Spatial Monitoring and Reporting Tool) software to improve patrolling and enforcement, and 3) the use of camera traps to survey and monitor wildlife populations. Deploying these technologies will enable new levels of analysis, help to monitor the surrounding environment, and combat illegal activities. Over the coming year, WWF will continue to test these technologies in ARPA protected areas so they can eventually become
standard tools to help measure our progress and contribute to the adaptive management of these protected areas.

**ARPA FOR LIFE FINANCIAL PLANNING**

At this point, ownership of the *ARPA for Life* financial model has been fully transferred to Funbio, and ownership of the cost model has been transferred to Brazil’s Ministry of Environment. The Ministry used the streamlined cost model to prepare the disbursement request for the 2018-2019 biennium, which was presented to the Transition Fund Committee in August 2017. The Committee approved several updates to the cost model in 2017. One of these updates was to include more activities related to natural resource management and community training under the participatory management component of ARPA.

Funbio is also managing the ARPA Phase III financial model, a tool that indicates how much funding must come from each source—including donors and government budget—to project Phase III funding needs on a year-to-year basis, to ensure that sufficient funding is available to cover estimated costs for the duration of the Phase III financial plan.

**PROMOTING SUSTAINABLE FINANCE MECHANISMS: ENVIRONMENTAL COMPENSATION**

In 2000, the Brazilian law that created the National System of Protected Areas established the concept of environmental compensation, whereby companies responsible for projects with significant environmental impact—such as the construction of large factories, hydroelectric dams, or electric transmission lines—would be required to pay an amount equivalent to a percentage of the value of the enterprise to create or manage protected areas in order to offset the unmitigable impacts of the project.

In May 2018, the law specifying the regulations for the application of environmental compensation resources to Brazilian protected areas was finally approved. The new law will unlock up to R$1.4 billion (USD $339 million at today’s exchange rate) for the Chico Mendes Institute for Biodiversity Conservation to use for protected areas in Brazil. A significant portion of this amount will be used to regularize land tenure within protected areas and the remainder will be invested in improving protected area management by funding infrastructure for administration, protection, research, environmental education, and visitation. The new law also includes provisions that will make contracting temporary staff for protected area management easier by increasing their contract tenures, broadening their range of activities, and making it easier to hire local staff from communities in and around the protected areas. The application of these resources in ARPA protected areas will provide crucial funding to complement our Transition Fund resources.

In planning *ARPA for Life*, we anticipated that these environmental compensation funds would make up part of the government’s contribution to help replace the Transition Fund, over time. It is therefore particularly encouraging to see this piece fall into place. At this time, these environmental compensation resources are only available for federal protected areas managed by the Chico Mendes Institute for Biodiversity Conservation. Though there are opportunities for applying environmental compensation funds at the state level, political turbulence prevented significant progress on this front in 2018. We will continue to advance this priority in the time ahead.
COMMUNICATIONS

In 2018, we celebrated ARPA’s 15th Anniversary and used that opportunity to spotlight the tremendous contributions ARPA has made to advance the conservation of the Amazon, as well as its contributions to tropical forest conservation on a global scale.

In collaboration with Brazil’s Ministry of Environment, Funbio hosted an anniversary celebration for ARPA on December 1, 2017, at the Museum of Tomorrow in Rio de Janeiro. About 200 individuals took part in the event, and guests included partners and representatives of the Brazilian government, NGOs, and international organizations. During the ceremony, ARPA partners, including park managers and residents, shared testimonials about the importance of ARPA for Brazilian protected areas and for communities in the Amazon.

As part of the event, we honored our ARPA partners for their extraordinary support of the program over the last 15 years, including WWF, the World Bank, the Inter-American Development Bank, the German Development Bank, Funbio, the Chico Mendes Institute for Biodiversity Conservation, and Brazil’s Ministry of Environment, and our generous private donors. During the event, we also presented an 8-minute-video that summarizes ARPA’s history, our progress, and features additional testimonials from community members who are deeply engaged in this work. We also created a 5-minute-video during the event, capturing the reactions of stakeholders as they reflected on reaching this extraordinary milestone for the project.

Beyond the anniversary event itself, WWF put out a press release in English and Portuguese and prepared a publication reflecting ARPA’s impact. Coverage of ARPA’s 15th Anniversary was published in 27 national and international outlets, including the France Press Agency, the EcoWatch website, and Isto É Magazine, one of Brazil’s major media outlets.

We also prepared a set of seven infographics illustrating the impact of ARPA on deforestation, biodiversity, and climate and disseminated these on the WWF-US website and on social media in recognition of ARPA’s 15th anniversary. Please find the full set of these infographics in Appendix 4.

In addition to these communications focusing on ARPA’s anniversary, WWF-US President & CEO Carter Roberts and WWF-Brazil Executive Director Mauricio Voivodic also co-authored an online opinion piece in November. In this piece, they highlighted the value of protected areas and ARPA, and outlined a strategy to prevent the rollback of environmental protections for the Amazon in Brazil. Please find the full text of the opinion piece in Appendix 3.
Someone recently said that WWF’s role is to help be a bridge — to ensure that the natural world remains and endures, until that time when governments, businesses and civil society come to recognize its true value.

We think that’s right, but we also believe we have a role to play in accelerating that process.

— WWF-US President & CEO Carter Roberts and WWF-Brazil Executive Director Mauricio Voivodic
Challenges and Lessons Learned

ARPA’s inspiring results over the past 15 years are a testament to all our partners and donors who have invested time, technical capacity, and financial resources in the program. These results also illustrate the success that is made possible by long-term commitment, such as: overcoming political and institutional transitions, navigating through national and global financial crises, and successfully engaging the complex challenges of managing and operating a program of this scale. ARPA’s success has made it a model for other countries that are seeking to implement large-scale, long-term conservation efforts. Bhutan for Life has just closed, while Peru and Colombia are currently designing similar programs.

The key challenges we see for ARPA in 2019 are:

1) Securing expected support from the Amazon Fund;
2) Achieving decrees for the remaining new protected areas required as an ARPA for Life condition;
3) Ensuring that Brazil’s federal government and its states can provide the counterpart funding required by the ARPA for Life financial model to continue to receive support from the program; and
4) Preventing further government actions against Amazon protected areas and weakening of environmental legislation in Brazil.

As we shared earlier in this report, significant progress has been made towards securing the expected support from the Amazon Fund. Our challenge now is to have the proposal finalized and approved before the current administration leaves office in December 2018.

Given the current political situation in Brazil, the creation of an additional 3 million hectares in new protected areas needed to meet the 6 million-hectare disbursement condition of ARPA for Life remains a challenge. Currently, there are more than 5 million hectares under consideration for protection. WWF is hopeful that the so-called “legacy incentive” many government officials experience during their last year in office will help ensure that at least 1-2 million hectares are designated as protected areas in late 2018.

This year’s long-awaited approval of the law regulating the application of environmental compensation resources to protected areas is a promising step towards achieving the counterpart funding required by the ARPA for Life financial model. Similar mechanisms are needed at the state level to ensure that those ARPA areas can also meet their funding goals.

Another major challenge that ARPA faces are the anti-environment and anti-protected area policies that are being promoted by the ruralista bloc in the Brazilian congress. WWF will address this challenge in 2019 by implementing the anti-Protected Area Downgrading, Downsizing, and Degazettement strategy described earlier in this report as well as developing and launching a public awareness campaign that highlights the value of protected areas for Brazilian society and families.

An important lesson we have learned from the current situation in Brazil is the need to complement our efforts to improve protected area management and financial mechanisms for sustainability with efforts to identify and communicate the value of protected areas at the local, regional, and national levels. Benefits provided by protected areas need to be explicitly
articulated and broadly disseminated so that efforts like ARPA garner widespread public support. In turn, this public support will help ensure that governments implement favorable policies and provide the financial support these protected areas need to thrive. WWF is also integrating this consideration into the design of future Project for Finance Permanence initiatives, modeled after *ARPA for Life*.

One of the challenges we discussed in last year’s report was the need to seek out efficiencies in protected area management that could help address the shortfall in staffing, given the pressure to not increase the number of government employees. To meet this challenge, we’ve deepened our work with the Chico Mendes Institute for Biodiversity Conservation and Brazil’s Ministry of Environment to promote more efficient, cost-effective monitoring technologies. The use of these technologies, such as camera traps and unmanned aerial vehicles, to support biodiversity monitoring, natural resource management, and enforcement has potential to greatly increase the quality and quantity of data available, enabling us to make management decisions without requiring additional staff. This is especially true if the technologies are deployed in a way to empower local communities to monitor and conserve the forest resources essential to their livelihoods. The new regulations for environmental compensation allow for funds to be used to contract limited-term technical staff, which should also help address this staffing deficit.

Strong collaboration between Funbio, Brazil’s Ministry of Environment, and the Chico Mendes Institute for Biodiversity Conservation, has resulted in the implementation of several innovations in planning and procurement processes that are helping to overcome the bottlenecks in disbursement identified as a challenge in previous reports. In addition, the Chico Mendes Institute for Biodiversity Conservation—with support from WWF—has made great progress on training state environmental agency staff in protected area monitoring protocols and, as a result, this is no longer considered a major challenge.

Finally, beyond the financial support to protected areas, including the goods, services, and infrastructure that ARPA provides, ARPA is investing in the sustainable development of the Amazon region by promoting a decentralized and participatory approach to protected area management. WWF believes this approach results in better social conditions for communities living in and around protected areas. Continued investments by ARPA using this approach will amplify its contributions to both biodiversity conservation and social development.
Looking Ahead

WWF will continue to support the implementation of ARPA Phase III, according to our long-range plan. As we encounter new challenges and opportunities, we will modify the plan accordingly, defending the progress we’ve made and forging ahead. We will reflect on the period since closing on ARPA for Life to synthesize the lessons we have learned and use them to make recommendations regarding the next 20 years of the Transition Fund. We will apply these findings not only to ARPA, but to the development and implementation of similar initiatives launching or currently underway in Bhutan, Peru, and Colombia, based on the ARPA model.

We will continue to contest expected future proposals for protected area downgrading, downsizing and degazettement in the Amazon, as well as attempts to roll back other environmental protections in Brazil.

We will also continue to support protected area planning, monitoring, and evaluation to assess ARPA’s impact and ensure that ARPA’s resources are directed to the highest priorities.

The upcoming Brazil elections in October 2018 will represent a critical inflection point for the future of conservation in the Amazon. The outcome will determine whether we will spend the next four years defending our hard-won gains, or whether we can continue to make advances in the conservation and sustainable use of the world’s richest repository of biological diversity and ecosystem services on the planet.

Despite the inevitable challenges, with the support of WWF and Funbio, we are confident that the institutions responsible for ARPA’s implementation will continue to meet their commitments to ARPA for Life.
Thank You

WWF is deeply grateful for the support and commitment of ARPA for Life’s many visionary partners. Through this extraordinary collaboration, we are collectively advancing an innovative, successful, and replicable approach to securing humanity’s natural heritage in perpetuity.
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APPENDIX 1
ARPA Indicators and Consolidation Tiers

Forms of Support

ARPA supports the costs of protected area creation (necessary studies and public consultation), consolidation (achievement of benchmarks for consolidation at two different levels) and post-consolidation permanent participatory management (supporting the maintenance of benchmarks after reaching Tier 1 or Tier 2 consolidation).

Indicators

The indicators link each activity developed in protected area management with targets set for the ARPA Program. The ARPA Program works with 15 different indicators:

1) Management Plan
2) Participatory Management
3) Terms of Commitment (for indirect use protected areas)
4) Concession of Use Rights (for sustainable use protected areas)
5) Signage
6) Demarcation
7) Land Tenure
8) Protection
9) Equipment
10) Installations
11) Research/Inventories
12) Monitoring
13) Registration in National Registry of protected areas
14) Annual Budgetary Allocation
15) Minimal Technical Team

Government resources are used to meet the benchmarks for indicators 13–15. ARPA resources are used to meet the consolidation benchmarks for indicators 1-12. The Protected Area Management Effectiveness Tool is used to assess and verify each protected area’s achievements for indicators 1-12.

Consolidation Tiers

Each protected area receives funding to attain either Tier 1 or Tier 2 consolidation.

**Tier 1:** A protected area is considered to be consolidated at Tier 1 when it reaches the following benchmarks:
- Management Plan: There is an approved management plan in place.
- Participatory Management: Representative council has been formally constituted.
- Signage: Signs are in place at the main access points of the protected area.
- Protection: A protection plan is implemented.
- Equipment: Acquisition (and maintenance) of a basic set of equipment is in place to ensure the operation of the protected area.
- Installations: Maintenance of existing installations (guard stations, etc.) successful.
- Monitoring: At least one indicator of biodiversity, resource use or landscape integrity is being monitored.
- National Registry of Protected Areas: Basic information in the registry is updated.
- Annual Budgetary Allocation: The budget allocation is compatible with the maintenance needs of the protected area: basic level.
- Minimal Technical Team: At least 2 people with effective presence are on site.

**Tier 2:** A protected area is considered to be consolidated at Tier 2 when it reaches the following benchmarks:
- Management Plan: There is an updated management plan.
- Participatory Management: The representative council is trained and functioning.
- Terms of Commitment (Indirect use protected area): There are signed commitment Terms.
- Concession of Use Rights (Sustainable use protected area): Signed concession is in place.
- Signage: There is maintenance/strengthening of signs in accordance with the management plan of the protected area.
- Demarcation: Markers indicate the borders of the protected area at strategic protected area points.
- Land Tenure: A complete survey of land tenure situation and actions for regularizing land tenure has been prepared.
- Protection: The protection and operations of the protected area are aligned with the management plan.
- Equipment: The acquisition and maintenance of a set of equipment needed for protected area to face threats and carry out more advanced management activities are in place.
- Installations: Construction (and maintenance) of headquarters or a visitor center for administration, accommodation and equipment storage are complete.
- Research/Inventory: Research and studies on management challenges of the protected area have been conducted.
- National Registry of Protected Areas: All information in the registry is updated.
- Budgetary Allocation: The budget allocations are compatible with the maintenance needs of the protected area - medium level.
- Minimal Technical Team: At least 5 people with effective presence are on site.
APPENDIX 2

List of ARPA Protected Areas and Map

(As of August 2018)

1. Alto Maués Ecological Station
2. Terra do Meio Ecological Station
3. Jutai-Solimões Ecological Station
4. Maracá Ecological Station
5. Maracá-Jipioca Ecological Station
6. Jari Ecological Station
7. Juami-Japurá Ecological Station
8. Niquí Ecological Station
9. Rio Acre Ecological Station
10. Amazônia National Park
11. Serra do Divisor National Park
12. Serra do Pardo National Park
13. Anavilhanas National Park
14. Pacaás Novos National Park
15. Cabo Orange National Park
16. Jamanxim National Park
17. Jaú National Park
18. Juruena National Park
19. Monte Roraima National Park
20. Rio Novo National Park
21. Viruá National Park
22. Campos Amazônicos National Park
23. Mapinguari National Park
24. Montanhas do Tumucumaque National Park
25. Nascentes do Lago Jari National Park
26. Serra da Cutia National Park
27. Serra da Mocidade National Park
28. Nascentes da Serra Cachimbo Biological Reserve
29. Abufari Biological Reserve
30. Guaporé Biological Reserve
31. Gurupi Biological Reserve
32. Jaru Biological Reserve
33. Lago Piratuba Biological Reserve
34. Rio Trombetas Biological Reserve
35. Tapirapé Biological Reserve
36. Uatumã Biological Reserve
37. Itatupá-Baquiá Sustainable Development Reserve
38. Arapixi Extractive Reserve
39. Arioca–Pruanã Extractive Reserve
40. Auati-Paraná Extractive Reserve
41. Barreiro das Antas Extractive Reserve
42. Chico Mendes Extractive Reserve
43. Chocoaré-Mato Grosso Extractive Reserve
44. Cururupu Extractive Reserve
45. Alto Tarauacá Extractive Reserve
46. Baixo Jurúá Extractive Reserve
47. Cazumbá-Itacema Extractive Reserve
48. Lago Capanã Grande Extractive Reserve
49. Médio Jurúá Extractive Reserve
50. Médio Purus Extractive Reserve
51. Rio Cajari Extractive Reserve
52. Rio Cautário Extractive Reserve
53. Rio Iriri Extractive Reserve
54. Rio Jutai Extractive Reserve
55. Rio Ouro Preto Extractive Reserve
56. Rio Xingu Extractive Reserve
57. Ipaú-Anilzinho Extractive Reserve
58. Ituxi Extractive Reserve
59. Mãe Grande de Curuçá Extractive Reserve
60. Mapuá Extractive Reserve
61. Maracana Extractive Reserve
62. Marinha Cuinarana Extractive Reserve
63. Marinha Mestre Lucindo Extractive Reserve
64. Marinha Mocapajuba Extractive Reserve
65. Renascer Extractive Reserve
66. Rio Unini Extractive Reserve
67. Riozinho da Liberdade Extractive Reserve
68. Riozinho do Anfráasio Extractive Reserve
69. São João da Ponta Extractive Reserve
70. Tapajós-Arapuã Extractive Reserve
71. Terra Grande Pracuúba Extractive Reserve
72. Verde para Sempre Extractive Reserve
73. Samuel Ecological Station
74. Rio Ronuro Ecological Station
75. Rio Roosevelt Ecological Station
76. Grão Pará Ecological Station
77. Serra dos Três Irmãos Ecological Station
78. Chandless State Park
79. Cristalino I e II State Park
80. Corumbiara State Park
81. Cantão State Park
82. Guariba State Park
83. Matupiri State Park
84. Rio Negro Setor Norte State Park
85. Rio Negro Setor Sul State Park
86. Sucunduri State Park
87. Xingu State Park
88. Guajara-Mirim State Park
89. Igapós do Juruena State Park
90. Serra de Ricardo Franco State Park
91. Serra dos Martírios-Andorinhas State Park
92. Serra dos Reis State Park
93. Maicuru Biological Reserve
94. Aripuanã Sustainable Development Reserve
95. Bararati Sustainable Development Reserve
96. Mamirauá Sustainable Development Reserve
97. Amanã Sustainable Development Reserve
98. Cujubim Sustainable Development Reserve
99. Juma Sustainable Development Reserve
100. Rio Amapá Sustainable Development Reserve
101. Rio Iratapuru Sustainable Development Reserve
102. Rio Negro Sustainable Development Reserve
103. Uatumã Sustainable Development Reserve
104. Igapé-Açu Sustainable Development Reserve
105. Matupiri Sustainable Development Reserve
106. Piagaçu-Purus Sustainable Development Reserve
107. Puranga Conquista Sustainable Development Reserve
108. Rio Madeira Sustainable Development Reserve
109. Uacari Sustainable Development Reserve
110. Canutama Extractive Reserve
111. Catuá Ipixuna Extractive Reserve
112. Guariba Extractive Reserve
113. Rio Cautário (Est) Extractive Reserve
114. Rio Gregério Extractive Reserve
115. Rio Paccás Novos Extractive Reserve
116. Guariba-Roosevelt Extractive Reserve
117. Rio Preto Jacundá Extractive Reserve
Protecting Progress in the Brazilian Amazon

November 15, 2017

By: Carter Roberts, President & CEO of WWF-US; and Mauricio Voivodic, Executive Director of WWF-Brazil

Here at World Wildlife Fund (WWF), our work always boils down to places and species and the communities they support. And among all the places in the world it’s hard to compete with the importance of the Amazon, which is why it has occupied our energies and attention more than any other.

This amazing place spans nine countries and supports one in ten of every species on our planet, while covering 1% of the Earth’s surface. A recent WWF report found that a new plant or animal species was discovered in the Amazon every two days between 2014–2015. It is, quite simply, home to the greatest wealth of plant and animal life on Earth. And it contains 154 million acres of indigenous lands, where more than 300 different languages are spoken by native peoples.

Beyond its irreplaceable biodiversity, the Amazon hydrological and climatological systems sustain life in the region, and across the globe. Its canopy helps regulate rainfall and weather patterns that deliver water to the region—not just for crops, but also cities to the South. This cycle relies on moisture from the forest itself evaporating into the atmosphere and then turning into rainfall as clouds move from east to west across the region.

Deforestation from increased development, agricultural expansion, illegal logging or wildfires could throw this delicate cycle out of balance. Some experts estimate that merely 20% deforestation could constitute a “tipping point,” after which the forest would dry out and weather patterns throughout the region would suffer. We are now perilously close, with 17% of the forest lost over the last 50 years.

The rainforest serves as a massive carbon sink, keeping 90–140 billion tons of carbon from releasing into the atmosphere. Allowing a fraction of that carbon to escape via deforestation would accelerate climate change. Allowing all of it to escape would be catastrophic.

We have seen important progress in recent decades, with deforestation rates dropping by 75% between 2000 and 2012. Much of that progress is the result of ARPA (or Amazon Region Protected Areas), an initiative of the government of Brazil which WWF, the World Bank, the Global Environment Facility, the Gordon and Betty Moore Foundation and many others have been supporting since it began. Launched in 2002, ARPA now protects nearly 150 million acres of rainforest—the largest tropical rainforest conservation project in history.

In 2014, WWF helped finalize a deal which created a $215 million “transition fund” to help Brazil cover the costs of maintaining these areas until it can assume the full cost on its own. According to one study, the ARPA initiative will help Brazil avoid at least 1.4 billion tons of carbon
emissions by 2050. But deforestation rates rose 29% between 2015 and 2016, and while they again trended downward between 2016 and 2017, recent events in Brazil could lead to further losses.

A perfect storm of political and economic upheaval in Brazil—which holds a majority of the Amazon within its borders—now threatens to unleash agricultural and mineral development in previously protected areas of this unique ecological region, with potentially severe impacts on the hydrological cycle, wildlife and people. We can’t let that happen.

After years of growth, Brazil’s economy is now in crisis—the result of a fall in global commodity prices and a pervasive corruption scandal that centers on the country’s major economic institutions. For the first time since 1931, the country’s GDP has fallen for two consecutive years, while unemployment has nearly doubled and the government deficit has increased to levels not seen since 2001.

The Brazilian government has also been beset by political turmoil. Allegations of obstruction of justice and criminal misuse of federal funds engulfed former President Dilma Rousseff’s administration, leading to her impeachment and the conviction of her predecessor on criminal charges. Fresh allegations involving illegal campaign donations now plague the current president, Michel Temer, weakening his hold on power.

Moreover, in April, over a third of government ministers and dozens of senators and representatives in Congress were placed under investigation. Mass protests by the Brazilian public have followed. Thousands took to the streets of Brasilia in May, in a demonstration that was ultimately quelled by the deployment of federal troops after the Agricultural Ministry building was set on fire.

As traditional power centers have collapsed, a large block of “ruralistas” have maintained a majority in Congress, gained influence over President Temer and driven an aggressive agenda focused on agricultural expansion. Unfortunately, to achieve this expansion, the Brazilian President and his allies have made clear that they are willing to undo decades of conservation gains with little regard for the consequences.

The last six months have brought a flurry of measures from the Congress that threaten to exacerbate deforestation by opening up two prominent protected areas (over 2 million acres) to agricultural production. After those measures moved to the President’s desk for signing in June, WWF worked with others to orchestrate a global campaign to convince Temer to veto the measures.

Through the first six months of 2017, WWF-Brazil helped generate more than 800 news articles about the various efforts to downgrade, downsize or degazette protected areas. The campaign included tweets from celebrities with millions of global followers like Gisele Bündchen and Leonardo DiCaprio; and a social media initiative that reached more than 3 million people and garnered more than 20,000 signatures for a public petition against the measures.

It also included op-eds by leaders, such as WWF-US National Council member Tom Lovejoy; an excerpt from Tom’s op-ed is below, illustrating the kind of “tipping point” scenario America experienced during the dust bowl which could also happen in the Amazon if we aren’t careful:
It was straight out of the Book of Job. In the midst of the Great Depression of the 1930s, some unknown and unaware farmer in the American Middle West cut some trees that tipped the center of the North American continent into an environmental plague: The Dust Bowl. Gigantic dust storms dominated the Plains and crippled its agriculture for years. Only massive tree planting, the creation of a major government program called the Civilian Conservation Corps, and better plowing and planting were able to bring back American agriculture to what it is today.

On June 13, the news finally came, and in an unexpected fashion. At 12:11 pm local time in Brasilia, President Michael Temer issued a tweet announcing he was vetoing the measure. Of note, he addressed Gisele and WWF directly in signaling his intent:

![Michel Temer](image)

Unfortunately, our celebration was short-lived. New legislation once again began moving through the Brazilian Congress to replace the vetoed measures — more than 30 bills in total that could put 19.7 million acres at immediate risk. And in August, the President announced the opening of another area in the northern Amazon — known as the National Reserve of Copper and Associated Minerals (RENCA) — to commercial mining that would have increased pressure on protected areas. A Brazilian court has since suspended the President’s decree, and the Administration subsequently withdrew it.

In the past, Brazil’s commitment to protect the Amazon made the nation a world leader in the fight against climate change. Global deforestation is responsible for roughly 15–20% of annual CO2 emissions. Brazil’s backsliding threatens efforts to reduce these figures and jeopardizes future funding for Amazon conservation.

Norway has given over $1 billion to Brazil’s Amazon Fund since 2008, and had pledged to continue giving about $120 million annually through 2020. But that commitment requires Brazil to meet certain benchmarks. Norway has already cut its current annual payment in half due to increased deforestation in the Amazon, and could end payments if deforestation rates continue to rise. The same holds true for the $215 million raised for ARPA. If the government of Brazil steps back from its pledge to protect the Amazon, other nations could follow.

This will be one of the great litmus tests of our movement: can we marshal the resources necessary to secure the gains we’ve made and chart a new path forward?

Someone recently said that WWF’s role is to help be a bridge — to ensure that the natural world remains and endures, until that time when governments, businesses and civil society come to recognize its true value. We think that’s right, but we also believe we have a role to play in accelerating that process.
Other nations in the Amazon region are making good progress. Peru is working with WWF to finance the protection of 41 million acres, and Colombia is working to finance the protection of 42 million acres—a particularly important step as that nation emerges from decades of armed conflict and begins to develop areas of the country that were previously too volatile to access. It would be a shame to take steps forward in those countries only to step backward in Brazil. Here are the steps we, as conservationists, need to take to keep the Brazilian Amazon protected:

1. **Support Allies in the Brazilian Government**
   
   We should continue working with allies in the Brazilian Congress to block or delay legislation that would further encroach on protected lands. These allies form the Frente Parlamentar Ambientalista, headed by Alessandro Molon. We can also engage with the Temer Administration and urge them to listen to the voices within their government that favor conservation. Indeed, although President Temer has appointed a number of pro-development leaders to lead Brazilian agencies, there are many others employed by the government who understand the threats posed by deforestation and are quietly working to influence decision-makers. And we can monitor relevant cases brought before Brazil’s judiciary, which has historically served as an important bulwark against the overreaching impulses of the executive and legislative branches.

2. **Mobilize the Brazilian Public**
   
   Outside of the government, conservationists can work to inform and energize the Brazilian people. The vast majority of Brazilians live in cities and may not be aware of the tangible benefits that the Amazon brings to their daily lives, such as its role in regulating the rainfall and weather patterns that deliver water to Rio and Sao Paulo. Let’s make sure all Brazilians understand what they stand to lose.

3. **Engage the Brazilian and Global Business Community**
   
   Many global corporations have pledged not to source any commodities, like soy and beef, that are produced through deforestation. As ruralistas in Brazil continue to push the boundaries of where they can clear forests, we need these companies to be more vigilant than ever in tracing the origin of their products.

4. **Strengthen Financial Signals**
   
   The fate of ARPA, as well as Brazil’s economy in general, is tied largely to financing from international banks, governments and private donors. ARPA for Life funds are already tied to performance benchmarks, so we can work with the financial backers of that initiative to communicate with the Brazilian government about the implications of implementing any new anti-conservation measures. And we can engage banks and other financiers to discourage investments in infrastructure, mineral or agricultural development that have negative environmental impacts and establish incentives that encourage green growth.

The mission of keeping 80% of the Amazon intact for all time will not be accomplished in a month or even a year; it will be the cumulative result of many people over many years standing up for what’s right. We look forward to standing with our WWF colleagues, our global network of supporters, and the people of Brazil for as long as it takes.
APPENDIX 4 - ARPA 15th Anniversary Infographics

Celebrating 15 Years of the Amazon Region Protected Areas Program

**More land protected**
In 2006, Brazil set a goal of 10% of the Brazilian Amazon (or 110 million hectares) being protected by 2020. Through ARPA, more than 27 million hectares have been designated as protected and 80.8 million are receiving ongoing support for protection and effective management. Meeting this goal is Brazil's contribution to the global goal of 17% of the world's terrestrial land being protected by 2020.

**Less deforestation**
Deforestation rates have been 2.3 times lower in protected areas that are part of ARPA than similarly categorized protected areas that are not part of ARPA. The mean annual deforestation rate for the former was 4.7 km²/yr (0.14%) and for the latter was 14.5 km²/yr (0.27%) between 2006 and 2015.

**Less CO₂ emitted**
At least 5.1 billion tons of CO₂ emissions avoided by 2015, representing 16% of the world's total. That is roughly equivalent to the United States’ total energy-related CO₂ emissions in 2016.

**More benefits for people, plants and animals**
Within ARPA areas, there was a 1.7% increase in how effectively the protected areas were managed from 2005 to 2015. The level of effectiveness in protected areas outside of ARPA barely changed. More effective management means healthier ecosystems, which means people, plants and animals get the water, food and other "services" they need from nature.

**More water to generate more energy**
A 12% increase in water volume available for hydropower production by 2050 (142 billion m³) if conservation measures are in place vs. not being in place. The conservation measures, a proper management of all Brazilian Amazon protected areas (not just those currently included in ARPA) and full implementation of the Brazil Forest Code. The 12% increase translates to more than 9 billion more kilowatt hours in annual energy production, worth USD $77 million in year 2000 currency.

(RESULTS EXPECTED IN THE FUTURE)

**A lot of biodiversity**
A study of 39 of the ARPA areas revealed more than 8,800 species. That represents approximately 88% of the bird species, 56% of the mammal species and 55% of the reptile species for the entire Amazon.

**Local economy strengthened**
$23 million per year for local communities in 39 protected areas—due to the sale of forest products from ARPA protected areas, as well as equipment and supplies needed to properly manage the protected areas.
More land protected

In 2006, Brazil set a goal of 30% of the Brazilian Amazon (or 110 million hectares) being protected by 2020. Through ARPA, more than 27 million hectares have been designated as protected and 60.8 million are receiving ongoing support for protection and effective management. Meeting this goal is Brazil’s contribution to the global goal of 17% of the world’s terrestrial land being protected by 2020.

Source: Brazil Ministry of the Environment, 2017
Less deforestation

Deforestation rates have been 2.3 times lower in protected areas that are part of ARPA than similarly categorized protected areas that are not part of ARPA. The mean annual deforestation rate for the former was 47 km²/year (0.14%) and for the latter was 145 km²/year (0.33%) between 2008 and 2015.

Source: Prodes, 2017
Less CO₂ emitted

At least 5.1 billion tons of CO₂ emissions avoided by 2050, representing 16% of the world’s total. That is roughly equivalent to the United States’ total energy-related CO₂ emissions in 2016.

Source: Soares-Filho, B. et al. Reducing Carbon Emissions from Deforestation: The Role of ARPA’s Protected Areas in the Brazilian Amazon. 2008
More benefits for people, plants and animals

Within ARPA areas, there was a 17% increase in how effectively the protected areas were managed from 2005 to 2015. The level of effectiveness in protected areas outside of ARPA barely changed. More effective management means healthier ecosystems, which means people, plants and animals get the water, food and other “services” they need from nature.

Source: Assessment of the Management of Conservation Units, WWF-Brazil, 2017
More water to generate more energy

A 12% increase in water volume available for hydropower production by 2050 (162 billion m³) if conservation measures are in place vs. not being in place. The conservation measures are proper management of all Brazilian Amazon protected areas (not just those currently included in ARPA) and full implementation of the Brazil Forest Code. The 12% increase translates to more than 9 billion more kilowatt hours in annual energy production, worth USD $77 million in year 2000 currency.

A lot of biodiversity

A study of 39 of the ARPA areas revealed more than 8,800 species. That represents approximately 88% of the bird species, 68% of the mammal species and 55% of the reptile species for the entire Amazon.
Local economy strengthened

$23 million per year for local communities in 30 protected areas—due to the sale of forest products from ARPA protected areas, as well as equipment and supplies needed to properly manage the protected areas.