

THE RISING  
**TIDE**

ANNUAL REPORT | 2015







Each year that I have spent as TIDE's Executive Director has been unique and filled with exciting news as the reach of our programs expands and our impact grows. Seeing our impact is what keeps me motivated on the journey towards TIDE's vision and keeps me passionate about why I have dedicated my life to this organization. In this annual report, we take the opportunity to highlight TIDE's impact over the years, which has paved the way to the remarkable accomplishments of 2015.

In 2015, we widened our reach and scope, taking our influence to the national level. The government's decision to roll out Managed Access nationwide, based on lessons learned from successful pilots in Port Honduras and Glover's Reef Marine Reserves demonstrates TIDE's capacity to pioneer transformative programs together with our partners and inspire action at the larger scale. We started to build grassroots capacity for climate change adaptation in coastal communities countrywide through a partnership with other organizations. Our

fisheries research reached global audiences when we co-published a paper presenting "An indicator-based adaptive management framework and its application to data-limited fisheries in Belize" with partners from the University of California at Santa Barbara, Wildlife Conservation Society, The Nature Conservancy, Environmental Defence Fund and others, and when we shared the results of our research on conch size at maturity with other Caribbean countries at the Gulf & Caribbean Fisheries Institute (GCFI) conference. In partnership with GCFI, TIDE hosted a regional workshop that built climate change adaptation capacity in managers of nine Mesoamerican Reef MPAs as well as partners from the wider Caribbean. We continued to work with the Ministry of Education and partner NGOs to improve the delivery of environmental education in Belize's schools to ensure the next generation of Belizeans is aware of environmental issues and inspired to make a difference. Meanwhile, our ground-breaking programs continued to be recognized internationally, with our Freshwater Cup winning the prestigious World Energy Globe Award.

Despite escalating challenges ahead, I know that with the help of our motivated staff team, our dedicated board of directors and our committed funders and partners, our impact will continue to grow to achieve a bright and sustainable future for the people and wildlife of Toledo and Belize as a whole.

Celia Mahung  
Executive Director



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## Mission:

*To engage stakeholders in the sustainable management of natural resources within the Maya Mountain Marine Corridor of southern Belize for the benefit of all.*

## Vision:

*Toledo's healthy ecosystems support biodiversity, communities and sustainable development.*





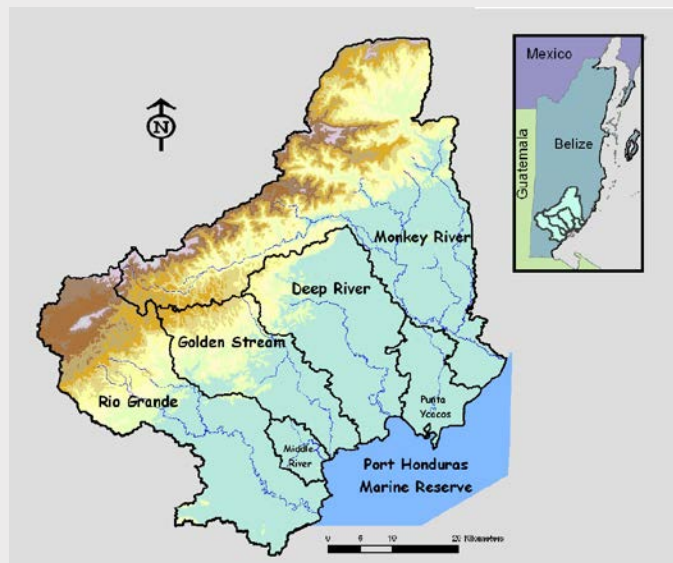
## ABOUT TIDE

TIDE is safeguarding biodiversity and natural capital in one of the most pristine parts of the Mesoamerican Biodiversity Hotspot, the Maya Mountain Marine Corridor of southern Belize. Recognizing the interdependent nature of this landscape and its people, TIDE works with stakeholders to implement holistic landscape-level strategies to preserve the natural processes and habitats that sustain biodiversity and people.

Within the Maya Mountain Marine Corridor, TIDE manages three protected areas: Port Honduras Marine Reserve, Payne's Creek National Park, and the TIDE Private Protected Lands. These areas protect at least 39 species of international concern, including jaguars, yellow-headed parrots, howler monkeys, tapirs, West Indian manatees, hawksbill turtles, and great hammerhead sharks.

We are committed to building local capacity for sustainable natural resource management, and community participation is a strong feature in all four of our program areas:

- Natural Resource Management
- Research and Monitoring
- Environmental Education
- Sustainable Development



*The Maya Mountain Marine Corridor is an 830,000-acre ridge-to-reef landscape that connects the Maya Mountains with the coastal waters and coral reefs of the Gulf of Honduras.*

# 2015 HIGHLIGHTS



1 Following the successful pilot by TIDE and partners, in 2015 the Government of Belize took the landmark decision to roll out Managed Access to all 3,000 square miles of Belize's near-shore fishery. This is a world first and a major step toward fisheries recovery in the Mesoamerican Reef (more on page 8).



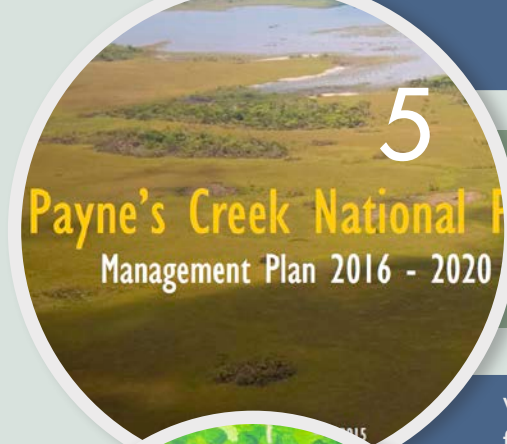
2 Zero acres of mangroves, seagrass and coral reef lost in Port Honduras Marine Reserve since 1980. Pine forest extent in the Maya Mountain Marine Corridor doubled since 1974 (Page 15 for more)



3 Supported community groups to plant >1,100 trees to stabilise riverbanks in 2015 (9100 trees planted since 2005) (see page 18)



4 26 yellow-headed parrots fledged from our artificial nest boxes in 2015 and another 13 were successfully released in the wild (page 14).



5 New management plans completed for Payne's Creek National Park and our TIDE Private Protected Lands. All three of our protected areas now have up-to-date plans, helping to protect 160,000 acres of key habitat and ≥39 species of international concern (page 12).



6 Won the 2015 Energy Globe World Award Youth Category for our Freshwater Cup environmental soccer tournament. We reached an important landmark in 2015: an equal number of boys and girls took part, almost 1,000 children (page 29).



7 Granted high school scholarships to 52 students from 10 communities. TIDE has supported 192 students since 2001 (page 21).



8 Trained five more local youths as TIDE community researchers (total 25 to date) and developed a new level 2 course, providing advanced skills to five experienced community researchers, and helping to develop the next generation of Belizean conservationists (page 27).





## RESOURCE PROTECTION

### Managed Access

Since 2011, TIDE has piloted Managed Access fisheries in Port Honduras Marine Reserve, together with the Fisheries Department, Environmental Defence Fund and other partners.

### *September 2015: Managed Access roll-out to all 3,000 Sq. Miles of Belize's Near-Shore Fishery*

Managed Access grants commercial fishing rights to local, traditional fishers only, putting an end to open access fishing, securing livelihoods, and fostering a sense that “this is our area and we need to take care of it.”

The pilot resulted in measurable increases in catches of lobster and finfish, compliance with regulations, sense of ownership and participation. At a Fishers Forum in September, fishers stated they were pleased with the improved protection of Port Honduras Marine Reserve through TIDE’s partnership with the Belize Coast Guard and that they are seeing fewer non-Belizean fishers in the reserve.

## RESOURCE PROTECTION

In a national consultation with fishing communities, there was overwhelming support for expansion of Managed Access, and in September 2015, the Belize Cabinet approved the roll-out to all 3,000 square miles of Belize’s near-shore fishery. This is a major milestone on the way to fisheries recovery in the Mesoamerican Reef.

Managed Access is the first nationwide rights-based fishing program in a lower-income country. Belize is leading the way and creating a model for restoration of tropical developing world near-shore fisheries.



*Managed Access fisher Leonardo Cus in Port Honduras Marine Reserve. Photo credit: Jason Houston.*

### Climate Change Adaptation

### *20 participants from 9 marine protected areas and 10 partner organisations attended the workshop in Punta Gorda.*

In February 2015, TIDE and the Gulf & Caribbean Fisheries Institute hosted a regional workshop, “MPA management challenges through a climate change lens.” Managers of nine Mesoamerican Reef MPAs, plus 10 partner organisations in the wider Caribbean learned from world experts such as Petra MacGowen, TNC’s Reef Resilience program manager, Britt Parker, international climate change coordinator of NOAA’s Coral Reef Conservation Program and Dr. Paul Marshall, former director of the Great Barrier Reef Marine Park Authority’s Climate Change Action Program.

Participants were exposed to cutting-edge tools such as NOAA’s Coral Reef Watch (coral bleaching early warning system), Australia’s Reef Guardians (coral reef stewardship program) and TNC’s Local Early Action Planning (a toolkit for facilitating community-level climate change adaptation planning). TIDE’s own community researcher and community steward programs featured prominently as best practices for engaging communities and building reef resilience.



**Climate Change Adaptation**

The MPA managers returned to their respective sites armed with plans to apply these tools. As a result:

- TIDE has used NOAA Coral Reef Watch to trigger bleaching surveys in Port Honduras Marine Reserve.
- Roatan Marine Park (Honduras) is preparing an Outlook Report (based on GBRMPA Outlook Reporting) to raise awareness of climate change vulnerabilities and solutions among decision-makers and local stakeholders.
- The Marine Natural Monument Archipelago Cayos Cochinos (Honduras) is working toward replicating TIDE’s community stewards program.
- Parque Nacional Arrecifes de Xcalak (Mexico) has teamed up with OCEANUS to use coral nurseries to reinforce the protection of key coral reefs from coral bleaching.
- Parque Nacional Arrecife Alcranes (Mexico) is addressing a need for coral reef monitoring data by applying a simple methodology from Australia’s Great Barrier Reef to take a snapshot of climate change vulnerability.
- TIDE has partnered with the Australian High Commission to the Caribbean to develop a Belizean version of Australia’s proven Reef Guardian Schools program.
- TIDE and Belize Audubon Society have supported four coastal communities to develop Local Early Action Plans – a first for the Caribbean (more on page 20).

Climate change workshop participants at TIDE’s headquarters in Punta Gorda



Port Honduras Marine Reserve ranger Narciso “Yao” Martinez. Photo credit: Melissa Luna.

**More Cost-Effective Enforcement**

When resources for conservation are scarce, cost-effectiveness is crucial.

*Three-fold increase in cost-effectiveness of enforcement in Port Honduras Marine Reserve in 2015*

We made great improvements in the effectiveness and efficiency of enforcement in Port Honduras Marine Reserve. The rate of successful convictions for illegal fishing in 2015 was 0.67 per month, much higher than in the previous three years (0.25 convictions per month).

At the same time, we decreased spending on PHMR enforcement from US\$4,430 per month (2012-2014) to \$3,070 per month (2015). Thus, the mean cost per conviction has decreased from \$17,700 to \$4,580.

The main methods we used to increase cost-effectiveness were:

- SMART, (Spatial Monitoring and Reporting Tool), a software that allows park rangers to digitally record times and locations of infractions in the reserve and plan more intelligence-based patrols.
- Partnership with the Coast Guard, providing security and enabling more night patrols.
- Building a more motivated and professional ranger team. For example, in August 2015, TIDE rangers participated in enforcement training in Honduras via a workshop called “Enhancing Enforcement Capacity in Priority Caribbean MPAs”.



### New and improved Protected Area Management Plans

**ALL 22,000 ACRES of the TIDE Private Protected Lands were recognised in the National Protected Areas System.**

Four students from Colorado State University's Conservation Leadership through Learning program partnered with TIDE and stakeholders to develop the first ever comprehensive management plan for the TIDE Private Protected Lands.

As a result, TIDE has a clear picture of the biodiversity we seek to protect in these lands, the threats to address and the strategies we will employ over the next five years.

Having a management plan was the final step needed to achieve another big result for the TIDE Private Protected Lands: official recognition of all 22,000 acres as part of the National Protected Areas System. The TIDE Private Protected Lands add value to the National Protected Areas System by adding species and ecosystems that are otherwise underrepresented, such as a rare swamp forest ecosystem and the critically endangered Central American river turtle (hicatee).

*TIDE's Assistant Terrestrial Manager, Eugenio Ah, and rangers, Delbert Pop and Luis Ishim, at the TIDE Private Lands field station.*



### New and Improved Protected Area Management Plans

A new management plan for Payne's Creek National Park (2016-2020) was also finalised in 2015.

The new plan takes Payne's Creek to the next level in sophistication of park management. For example, novel technology will aid spatial planning for fire management, law enforcement and potentially the creation of a sustainable extraction zone for community use.

In line with TIDE's mission, the new plan has an increased focus on conservation through community involvement.

Climate change adaptation measures and new knowledge gained over the last five years have been incorporated. For instance, *Zamia prasina* and other species of endangered and endemic plants, not previously known about, have now become conservation targets.

The full management plans for our protected areas can be downloaded [here](#).

*A gray fox in the savanna of Payne's Creek National Park.*



*Payne's Creek's pine savannah ecosystem is part of an endangered eco-region.*





**Yellow-Headed Parrots**

**59 Yellow-Headed parrots have fledged from our artificial nest boxes since 2012.**

Payne’s Creek National Park is one of the last strongholds for the endangered yellow-headed parrot. Habitat loss, wildfires and poaching are making it harder for them to find suitable nesting and roosting sites.

TIDE has been responding by installing artificial nest boxes, which have been very effective at increasing breeding success.

In 2015, our rangers installed another 10 boxes, bringing the total to 40. Out of 41 eggs laid in the boxes, 37 hatched, 35 successfully fledged and two were poached. Since 2012, 59 yellow-heads have fledged from our nest boxes.

Nine of the 2015 hatchlings were hand-raised at Belize Bird Rescue because they had low chances of survival in the wild. In October, they were “soft-released” back into the wild along with four former illegal pets confiscated by Forest Department. All 13 are now roosting in their natural habitat and doing well.

A yellow-headed parrot released back into the wild by TIDE’s rangers.



TIDE ranger Andrew Williams installs a yellow-headed parrot nesting box in Payne’s Creek.



**Marine and Coastal Ecosystems Maintained**

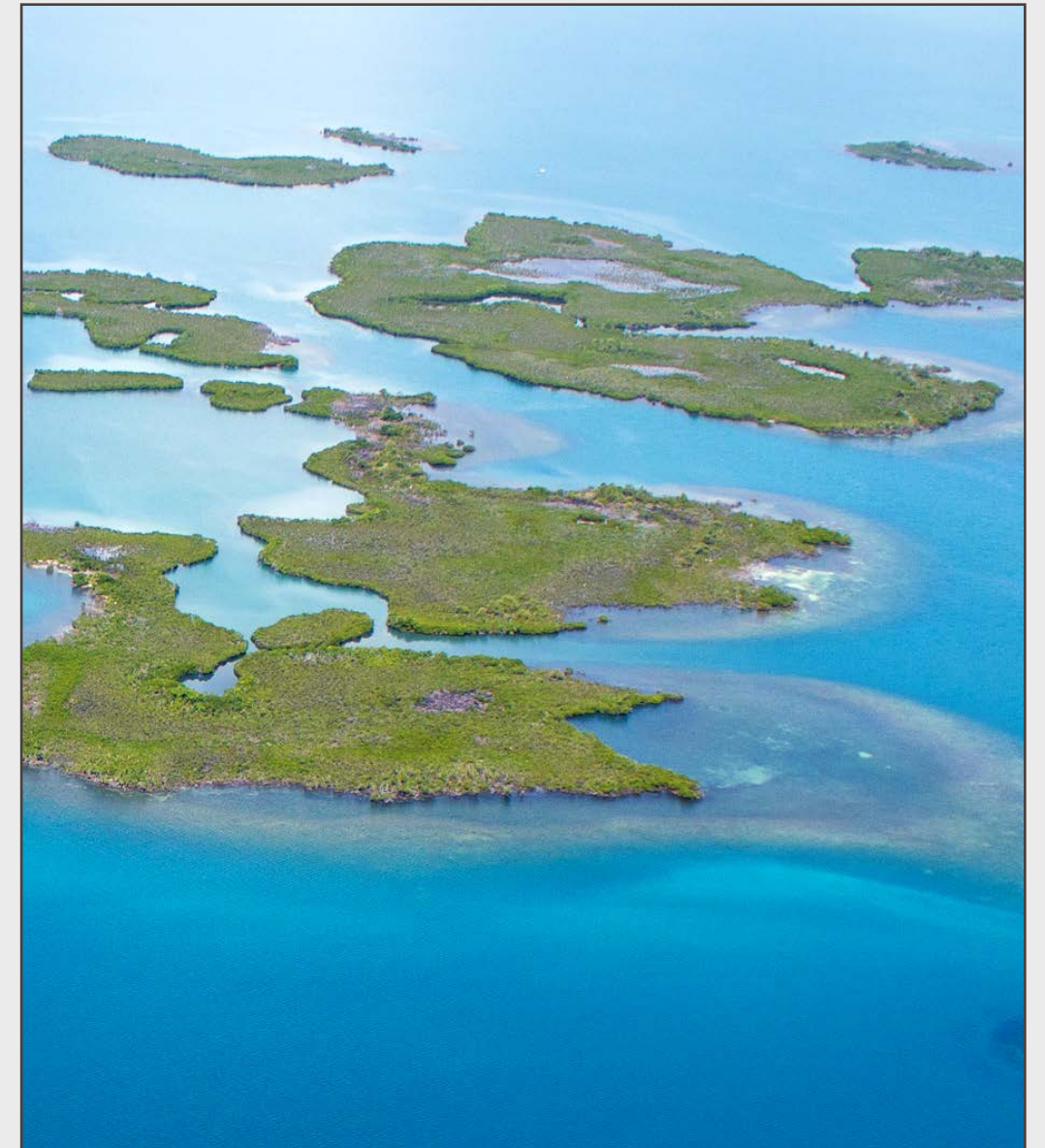
**ZERO acres of mangrove seagrass and coral reef area lost since 1980.**

In the Caribbean, coral reef cover has declined by more than 50% since the 1970s and 24% of mangrove area has been lost over the past quarter century.

In contrast, the extent of mangrove, seagrass and coral reef habitats in and around Port Honduras Marine Reserve has remained constant. There are still 1,770 acres of mangroves, 7,380 acres of seagrass and 936 acres of coral reefs in Port Honduras Marine Reserve, plus another 13,000 acres of mangrove along the coastal boundary of the MPA.

Legal protection of Port Honduras Marine Reserve, Payne’s Creek National Park and the TIDE Private Protected Lands, together with TIDE’s watershed management activities upstream, almost certainly contributed to this fantastic result.

There are 138 mangrove cays in Port Honduras Marine Reserve





Fire Management

*Our fire management program is helping 20,000 acres of pine savanna to regenerate.*

Belize's lowland pine savannas have been characterised by WWF as an endangered eco-region and a regional priority for conservation because this small (2,500 km<sup>2</sup>) ecosystem contains a singular mix of North and South American species. Almost half of Belize's endemic plant species occur only in this ecosystem, some of the best remaining examples of which are found in Payne's Creek National Park.

Wildfires are the most serious threat to this habitat and its unique species.

TIDE coordinates the Southern Belize Fire Working Group to manage wildfire across Toledo's pine savannas.

Pine saplings are more abundant in areas where we have been conducting prescribed burns, helping approximately 20,000 acres to regenerate.

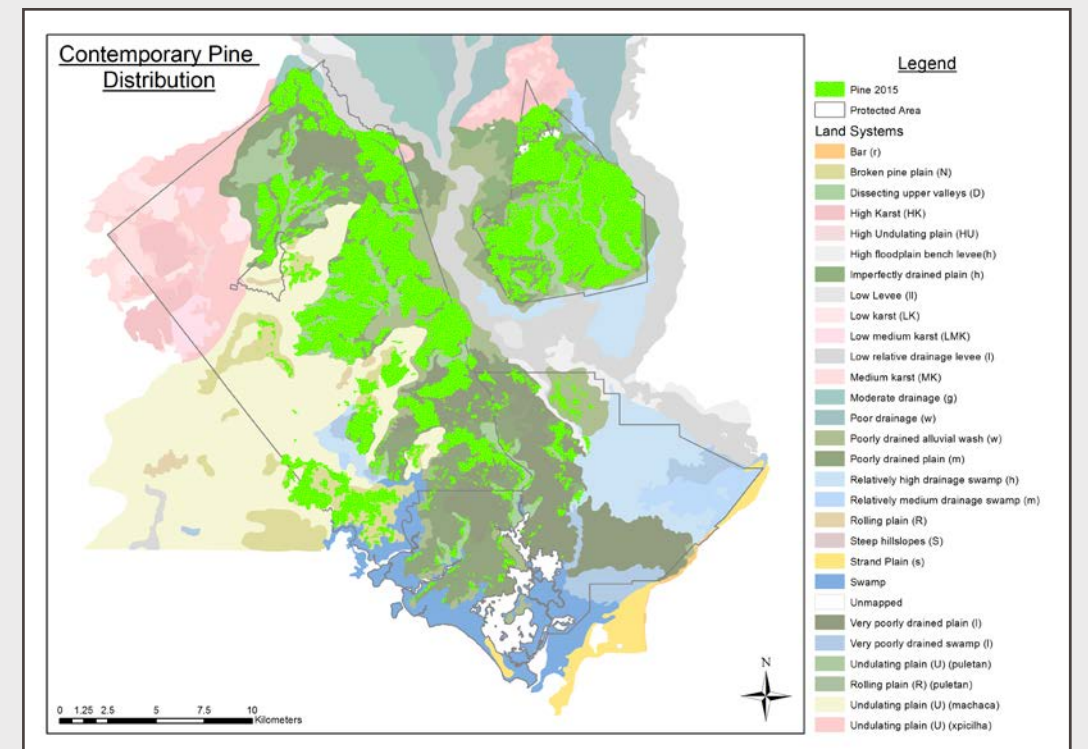
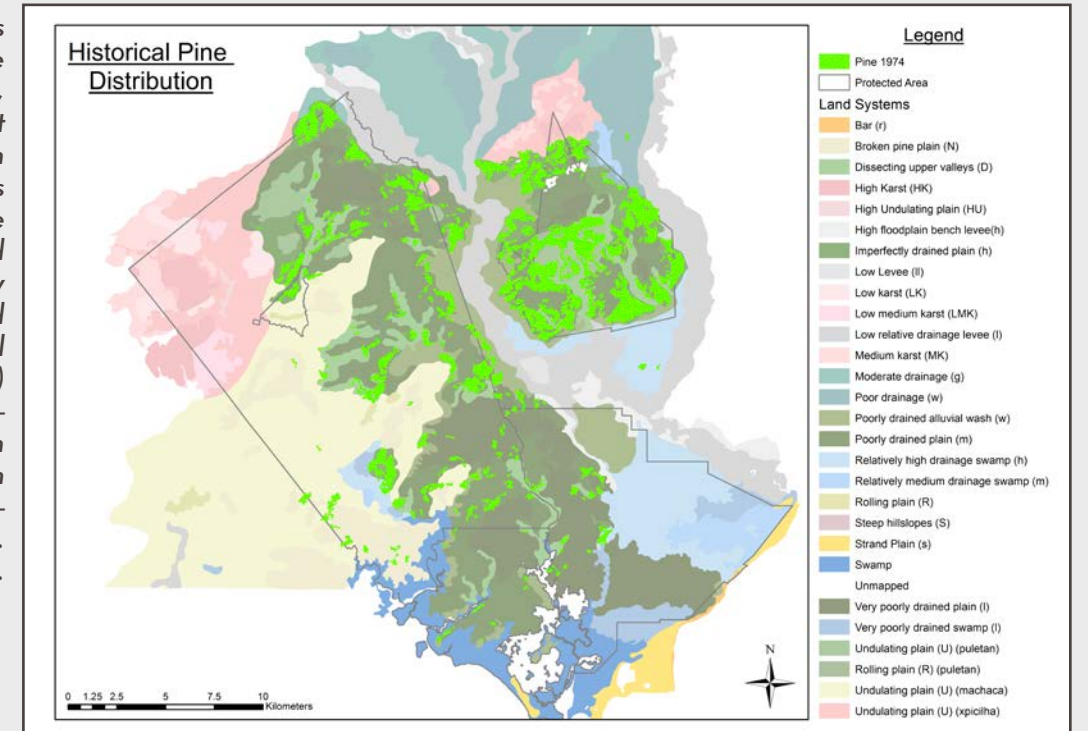
TIDE has been training protected area personnel throughout Belize in wildfire management since 2013 and the training is now yielding results. An example of the positive impact occurred early in 2015 when a ranger at Belize Audubon Society used his new skills to tackle a fire near St. Herman's Blue Hole National Park. He was able to coordinate a team to extinguish the blaze before it entered the park.

TIDE will continue to build national capacity in fire management in 2016 in partnership with University of Belize's National Training Program on Protected Areas Management. This will help to address a critical threat to Belize's forests, biodiversity and human well-being, and increase resilience to climate change.

*Prescribed burns help the pine savanna to regenerate.*



*Remote sensing studies by our partners at the University of Edinburgh, UK, show that the extent of Caribbean pine in Toledo's pine savanna has more than doubled since 1974. Figure reproduced with permission from study authors Neil Stuart and Jamie O'Keeffe. Original study: O'Keeffe, J., (2015) Analysing the Environmental Niches for Caribbean Pine and Palmetto Palm in Southern Belize. Unpublished MSc dissertation. University of Edinburgh.*







## SUSTAINABLE DEVELOPMENT

### Reforestation and Agroforestry

Since 2005, TIDE has been promoting community-led watershed management by inspiring community members to maintain and restore riverside forests and adopt agroforestry.

In 2015, we supported 71 villagers from San Pedro Columbia to plant more than 900 trees along the Columbia River.

*>9,100 trees planted in riparian buffers since 2005*

We trained 37 villagers, including members of community environmental organization Xucaneb, in tree grafting techniques and rebuilt the village tree nursery, housing up to 2,500 saplings. Xucaneb will sell grafted fruit tree saplings to generate income to continue its conservation efforts. A local supply of affordable grafted trees will also facilitate uptake and expansion of agroforestry.

37 participants pledged to increase their agroforestry production through tree grafting.

To date, this program has led to more than 9,100 trees being planted, storing carbon, creating wildlife corridors, and maintaining water quality for downstream villages, aquatic ecosystems and the Mesoamerican Reef.

## SUSTAINABLE DEVELOPMENT

*Trees planted on river banks maintain wildlife corridors, prevent erosion and improve water quality.*



### Livelihood Diversification : Tour Guide Training.

*14 people trained as tour guides in 2015.*

In 2015, TIDE enabled 14 young people to undertake tour guide training - 11 from Monkey River Village and three from Punta Gorda.

There has been an increase in marketing for the Monkey River Trail. This has led to an increase in visitation and obviously an increase in the demand for additional tour guides.

TIDE also upgraded the famous Monkey River Trail - see "Sustainable Tourism" below.

*Tree saplings at the re-established community tree nursery in San Pedro Columbia.*





**Local Early Action Plans**

Early in 2015 TIDE's Education and Outreach Coordinator Norman Budna and Meghan Gombos from Sea Change Consulting LLC facilitated Local Early Action Plans (LEAP) in two coastal communities: Punta Negra and Monkey River.

The goal was to raise awareness of climate change, identify vulnerabilities and develop actions to support long-term resilience of the communities and the resources they depend on.

**Two Local Early Action Plans created for two coastal communities.**

The two communities identified >20 actions to reduce their vulnerability, including:

- Creating a Watershed Alliance to educate farmers about the impacts of upstream activities on coastal communities and marine ecosystems, and find solutions.
- Diversifying income by developing mariculture, food processing, tourism and through access to higher education.

TIDE will support these communities to implement the actions in their LEAPs.

The low-lying coastal community of Monkey River is particularly vulnerable to climate change.



**Scholarships**

52 students from 10 communities were granted scholarships for the school year 2014-2015.

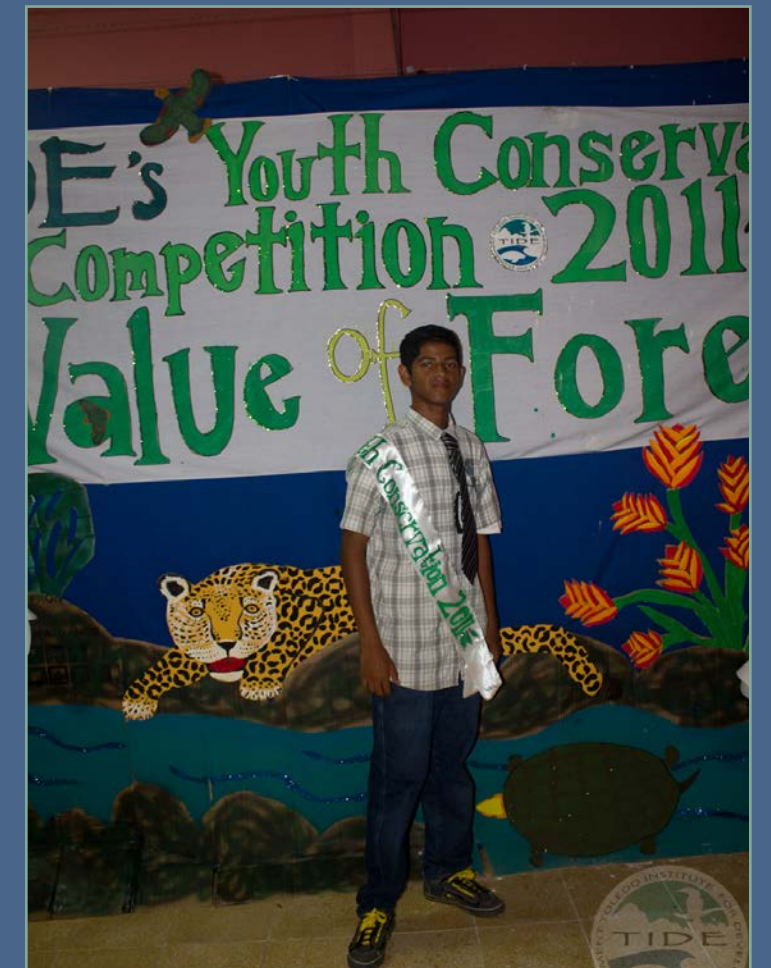
**Our scholarship program has helped 192 students since 2001.**

Since 2001, TIDE has supported 192 students through their high school education providing tuition and book scholarships

We asked one of our scholarship recipients, Rudolph Parham, to tell us what a high school scholarship has meant to him:

My name is Rudolph Parham and I am 20 years old. I received TIDE's scholarship for the duration of my studies at Toledo Community College (TCC). It helped me with all my tuition fees and book fees in order for me to successfully complete my secondary education. With the help of TIDE, I managed to enrol for 11 [exams], which I passed with seven grade 1s and four grade 2s. Towards the ending of my time at TCC, I participated in the Youth Conservation Competition where I won the title of Mr Conservation 2011-2012.

After graduating from TCC, I was awarded the Pestalozzi scholarship to study the International Baccalaureate in England. Upon completing my course, I returned to Belize where I am now taking a gap time before continuing my studies in mechanical engineering. The scholarship indeed helped me realize and achieve my goals up to now as it gave me the opportunity to complete my secondary education and go on to lengths greater than I imagined. The TIDE scholarship is one of the reasons why I am where I am at the moment. I could not be more grateful for the tremendous assistance it had rendered me.



Rudolph wins the title of Mr Conservation at the 2011 Youth Conservation Competition, themed "the value of forests".





# RESEARCH AND MONITORING

All research and monitoring activities conducted by TIDE are specifically designed to inform environmental action and policy.

## Commercial Fisheries Species

Conch densities have been declining in and around Port Honduras Marine Reserve since 2012.

TIDE is implementing measures to address this situation, namely Managed Access, agreeing expansion of replenishment (no-take) zones with fishers and conducting research to inform the design of more effective size limits.

The latter two measures are still in the pipeline though, and it appears that Managed Access alone is not enough to protect conch because our 2015 results showed densities are at an all-time low!

# RESEARCH AND MONITORING

## Commercial Fisheries Species

The good news is that new measures to protect conch are in the pipeline.

- New replenishment zone boundaries, which will increase the size of these zones by 60%, have been agreed with fishers.
- Preliminary findings of our conch size-at-maturity study suggest a more effective size limit can be set. We presented our findings at the 68th Gulf and Caribbean Fisheries Institute (GCFI) conference, where we were granted the GCFI/NOAA award for “exceptional contribution to the Caribbean peer-to-peer learning network on MPA management”.
- In 2016, we plan to work with fishers to agree further harvest control rules based on an “Adaptive Management Framework” developed by University of California at Santa Barbara, Environmental Defence Fund, TNC, TIDE and other partners.

*In 2015, lobster abundance in Port Honduras Marine Reserve increased to the highest level since 2012.*

The other good news is that the lobster population appears to be healthy and stable. During the 2015 closed season, abundance increased to the highest level since 2012.

Mean size also increased, indicating that there are more and larger lobsters – good news for future stock regeneration.

Lobster abundance and size are both greater within replenishment zones than in the general use zone of Port Honduras Marine Reserve, indicating that the replenishment zones are providing protection.



*Science Director James Foley and community researchers measure the length and lip thickness of queen conch.*



### Commercial Fisheries Species

The apparent improvement in lobster stock health since 2013 coincides with the introduction of Managed Access, increased engagement with fishers and improved enforcement.

Unfortunately, the news for sea cucumber is not good. Population density has decreased dramatically in Port Honduras Marine Reserve since 2012 and there are no signs of recovery.

Overfishing is seriously threatening sea cucumbers and our data suggest management interventions, such as a much reduced quota and new replenishment zones in prime sea cucumber habitat, are urgently needed to reverse this declining trend.

As with conch, in 2016, we plan to work with fishers to develop harvest control rules to save this important fishery.

Keep up to date with our latest research results: our research and monitoring reports can be downloaded [here](#).

School of parrotfish and surgeonfish in Port Honduras



### Coral Bleaching Monitoring

In November, we monitored coral bleaching in Port Honduras Marine Reserve to identify more resilient sites and assess the impact of El Niño on coral health.

Preliminary results from Port Honduras Marine Reserve are extremely encouraging:

- No full bleaching was observed on any coral colony at any of the ten sites monitored by TIDE.
- The least affected corals were within replenishment zones (no-take zones) indicating that replenishment zones are performing their intended function of maintaining higher coral resilience than general use zones. Alternatively, this result could indicate that replenishment zones are protecting sites which are naturally more resilient.
- Paling and partial bleaching were more prevalent outside the marine reserve than inside.
- Preliminary results suggest East Snake Caye possesses higher-than-average resilience to coral bleaching.

*No full coral bleaching recorded in Port Honduras Marine Reserve.*

### Sea Turtles

Read more [here](#).

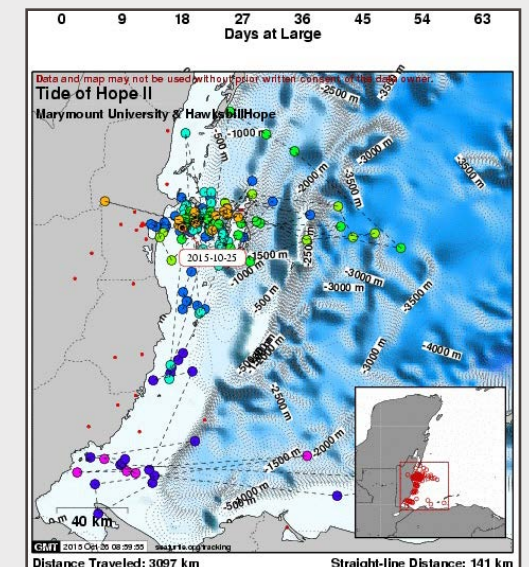
In August 2015, our science director, marine biologist and community researchers fitted a satellite tracker to a female hawksbill turtle laying her eggs on South Snake Caye in Port Honduras Marine Reserve. The results are helping us to understand how this critically endangered species uses habitats within the Gulf of Honduras, identifying areas in need of protection.

We monitor sea turtle nests and beach profiles to track erosion and save nests. 130 eggs laid by the turtle tagged in August have hatched.

*TIDE marine biologist, Tanya Barona, and community researchers tagging the hawksbill turtle Tide of Hope II.*



*The satellite tag provides precious information on the movements of Tide of Hope II.*





**Caught on Camera**

Photos from camera traps provided by Panthera Belize are helping us document wildlife presence and understand habitat preferences of priority species such as the jaguar.

In addition, camera traps can reveal the presence of poachers and illegal loggers.

A puma and a jaguar caught on camera in the TIDE Private Protected Lands.



**Community Researcher Training**

In 2015, five new recruits joined the ranks of our community researchers, bringing the total trained to date to 25.

We also created a new Level 2 course and trained five existing community researchers in more advanced laboratory and data analysis skills.

Community researcher Allana Barillas describes what the experience has meant to her:

*"I wanted to become one of TIDE's community researchers because a friend told me about the different surveys they do and how it helps you as a college individual to visualize things taught in school... I wanted to join because I love the sea and... wanted to explore more. I became a community researcher in June 2012 along with several colleagues. There are many highlights but my favorites are: 1) the different training, for example GIS, bird identification, and lab analysis (phosphates and nitrates testing); 2) the opportunity to work with people from all over the world that can teach you many new things; and 3) the different places you get to dive. Nothing beats actually getting involved in the marine underwater world and experiencing that whole other world that many people only hear about..."*

*Being a TIDE community researcher impacted my career and my personal goals... TIDE has given me an overview as to what it would be like if I became a marine biologist, or even a science director one day. I really appreciate how open both the marine biologist Tanya Barona and the science director James Foley have been and how willing they are to teach me new stuff along the way. I remember the first time I took my Coral and Fish ID Test, I got about 20% but with that extra boost from Tanya I got 95%. I am really grateful for that and the same goes for James. At times I have questions related to my school work and as soon as I get into James' office, he starts to open documents and books to give me the best answer possible.*

*With the skills received from TIDE I am hoping to get a job at an organization where I can help and protect [natural resources] and even help in making policies to better protect the natural resources here in Belize. I also hope to become a dive instructor one day... With the extra boost from those friends and work conducted with TIDE I realize that I can fulfil my dreams and be somebody helpful in the natural resources world."*



Allana diving in Port Honduras Marine Reserve.



TIDE's community researchers during their confined PADI Open Water dive.





## EDUCATION AND OUTREACH

### Raising Standards in Environmental Education

In 2015, we initiated a partnership with the Ministry of Education and schools to raise standards in environmental education, a strategy we believe will greatly increase our reach and cost-effectiveness.

We created lesson plans and teaching materials tailored to the national curriculum and involved teachers in field-testing and refining them ready for national dissemination.

In late 2015, we started the pilot of the Reef Guardian Schools Program: three schools in Punta Gorda participated in designing and testing a Belizean Reef Guardian Schools program in which schools improve standards in coral reef education and reduce their impact on the reef.

## EDUCATION AND OUTREACH



In 2015, Big Falls RC School took 1st place in the girls football competition and St. Peter Claver RC School took 1st place in the boys competition.



### Freshwater Cup Our Freshwater Cup wins the Energy Globe Award Youth Category 2015.

TIDE won the Energy Globe World Award Youth Category 2015 for our Freshwater Cup program, from over 2,000 entries from 177 countries. Freshwater ecologist Elmar Requena received the award on TIDE's behalf at a ceremony in Tehran in January 2016.

This is the third international accolade for the Freshwater Cup, which won the Experiences in Social Innovation Award from CEPAL in 2008, and the International Olympic Committee's Award for Integrating Sport and Sustainable Development in 2012.

The Freshwater Cup is a unique program that engages children in sports, environmental protection and personal development.

It puts children in the driving seat as the agents of change by involving them in planning and executing mini-projects to protect freshwater resources and downstream ecosystems.

### An equal number of boys and girls participated in the 2015 Freshwater Cup.

Since 2004, over 3,000 people have undertaken >170 mini-projects, resulting in >6,700 trees planted along waterways, >34,000 lb of trash removed, 16 green spaces or organic gardens created, numerous environmental murals painted, three illegal dumpsites removed, and >4,000 people receiving environmental education from their peers.

Three players in Belize's national team started out their careers playing in the Freshwater Cup!

The Freshwater Cup is growing each year – in 2015, almost 1,000 children participated.

The Freshwater Cup was the first sports competition in Toledo open to females, and in 2015, we reached an important milestone: gender parity, with as many girls as boys participating. Through the Freshwater Cup, hundreds of girls have demonstrated their ability and desire to play sports.



## EDUCATION AND OUTREACH

### TIDE Fish Fest Weekend

Fish Fest 2015 was the biggest yet with about 3,000 people.

This annual October event raises environment awareness, promotes traditional cultural practices, and kick-starts the tourism season, generating income for community members.



*In the Youth Conservation Competition, local youths compete for associate degree scholarships via theatrical performances that deliver an important environmental message. The 2015 theme was "eliminating waste and protecting the environment by reusing, reducing and recycling".*



2015 Fish Fest featured a fishing competition, bike race, live drumming and many more fun outdoor activities.



## EDUCATION AND OUTREACH

### TIDE Summer Camp

In 2015, we ran our regular summer camp for primary school children and started a new summer camp for high school students.

175 children and youths participated, learning about environmental issues, developing team skills and connecting with nature in our protected areas.



*Children and youths learn about the environment through fun activities at TIDE's Summer Camp.*



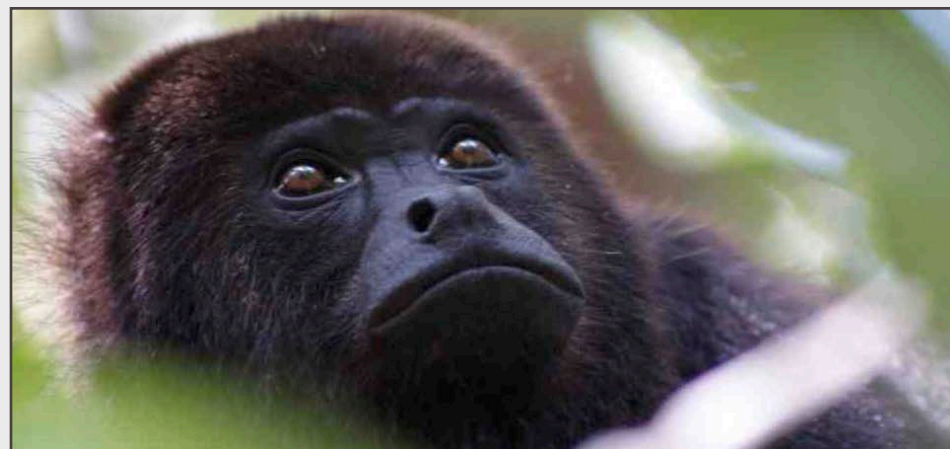




## SUSTAINABLE TOURISM

In 2015, we improved the tourism infrastructure at Payne's Creek National Park and TIDE Private Protected Lands, constructing new boardwalks and cabanas, interactive nature trails, an improved visitor centre at Payne's Creek and accommodation at TIDE's property in Big Falls Village.

We also made improvements to the Monkey River trail for the benefit of tour guides in Monkey River village.



*An endangered Yucatan black howler monkey.*

## SUSTAINABLE TOURISM



TIDE Tours launched new exciting vacation packages in 2015. The top selling package was "Footsteps of the Mayas", a journey through the rich culture and history of the Mayan communities of Belize.



Our conservation voluntourism program, Ridge to Reef Expeditions, gives international and Belizean volunteers life-changing experiences while contributing human and financial resources to TIDE's mission.

Ridge to Reef Expeditions is growing rapidly, doubling sales in 2015, its second year.

New cabañas in Payne's Creek National Park and a new guest house at our property in Big Falls village enable both sites to now house groups of 20+ people.

In 2015, we made another step toward financial self-reliance by taking up the management of Waluco's, a famous restaurant located next to TIDE's headquarters in Punta Gorda. The restaurant is providing additional financial resources to our conservation work while creating employment and promoting sustainable seafood.

[fromridgetoreef.com](http://fromridgetoreef.com)

Facebook







## GOVERNANCE

In 2015, our board of directors built its capacity in organisational governance with expert training from Brent Mitchell, senior vice president of the Quebec Labrador Foundation, and Lorenzo Rosenzweig, director general of Fondo Mexicano para la Conservación de la Naturaleza, Latin America's largest-endowed private national environmental fund.

Two important decisions taken by the board following this training were:

- To recruit Mr. Jerry Enriquez to the board. Mr. Enriquez is a founding member of TIDE, a social scientist, and a journalist known for his insightful social commentary and vision for a more just and sustainable Belize. We are proud to welcome him back to TIDE. Mr. Enriquez replaces director Mr. Alistair King, who served for 17 years.
- To establish, in 2016, a fundraising sub-committee made up of board members and other well-connected individuals committed to TIDE's vision and mission.



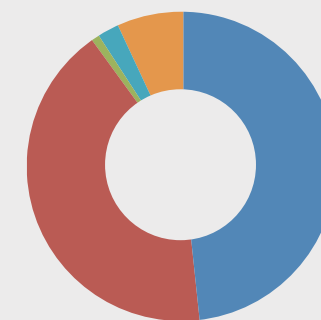
## FINANCES

The total 2015 income was US\$964,000 and came from private grants (49%), public grants (42%), and individuals, events and earned income (9%). We are extremely grateful for the support of all our 2015 funders, including the Australian High Commission, Darwin Initiative, Disney Worldwide Conservation Fund, GEF Small Grants Program, German Cooperation through MAR Fund, Government of Belize through the Tropical Forest Conservation Agreement, Mass Audubon, National Fish & Wildlife Foundation, New England Biolabs Foundation, NOAA through the Gulf and Caribbean Fisheries Institute, Oak Foundation, PACT, Rainforest Alliance, Seacology, Summit Foundation, Turtle Survival Alliance, UNICEF, and WWF.

2015 expenses were US\$ 904,000 comprised of Port Honduras Marine Reserve (67%), freshwater and terrestrial systems (16%) and administration, fundraising and communications (16%).

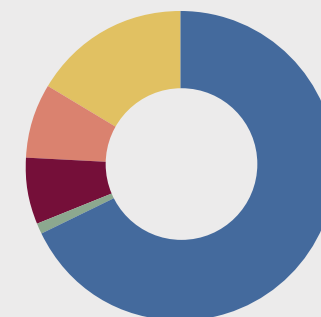
*Please note that these are unaudited financials. Our audited financial statement will be completed in mid-2016 and will be available upon request.*

2015  
INCOME  
(US\$)



- Grants, Private - \$468,074
- Grants, Public - \$402,308
- Contributions (Individuals and Events) - \$3,203
- Endowment Interest - \$24,691
- Miscellaneous (Fees for Services) - \$130,186

2015  
EXPENDITURE  
(US\$)



- Port Honduras Marine Reserve - \$1,217,185
- Fresh Water Systems - \$20,310
- Payne's Creek National Park - \$128,254
- TIDE Private Protected Lands - \$137,905
- Administration, fundraising & communications - \$291,088



# THE RISING TIDE

## ANNUAL REPORT | 2015

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