



2021 PROGRAM REPORT

Photo: Jake Faber



SouthWings

CONSERVATION
THROUGH
AVIATION

A message from our Executive Director

As I complete my 13th year here at SouthWings and my first serving as the organization's executive director, I'm deeply grateful for the many supporters, flight partners, and volunteer pilots who make our work possible. As demonstrated by the stories and flight results in this program report, our dedicated volunteer pilots and staff have adapted to the challenges the pandemic poses and together **we continue to support hundreds of flight partners** across the Southeast safely and effectively. While at times this has meant pilots flying solo to collect information and images for our flight partners, **we successfully matched our partners with an available volunteer for 95% of flights requested during 2021.**

SouthWings remains committed to our mission, firmly rooted in our region, and ready as ever to help our partners ensure the ecological integrity and environmental health of our region and communities. In fact, during 2021 a total of **13 new pilots joined SouthWings**, representing a 9% net increase in our volunteer network's capacity.

Throughout our **25-year history flying to protect the land and water of the Southeast**, SouthWings and our network of volunteers have played an integral role inspiring the storytelling and gathering the evidence that shifts perspectives and leads to long-term change. Above all, we combine the **spirit of volunteerism** with the magic of flight to keep hope alive and to find the inspiration and the will to keep seeking creative and effective solutions, even in challenging times.

Whether flying fragile coastlines during a King Tide on the Atlantic Coast to demonstrate the threat posed by rising sea levels, documenting oil spills after hurricanes pass through the Gulf of Mexico, or monitoring flooded coal ash ponds located perilously close to public water intakes along rivers, SouthWings flights reveal the bigger picture; our volunteers have shown so many influential decision-makers with their own eyes – and have shared with the world through the stories of journalists – the many reasons that we must keep fossil fuels in the ground, their carbon out of our atmosphere, and their contaminated waste out of our waterways and communities.

If the ongoing pandemic has taught us anything as we look to our changing climate, it's that even alone in our own homes, our individual health and safety are inextricably linked to that of our community. All of us depend on the health of the air, land, and water of this fragile blue marble we call home.

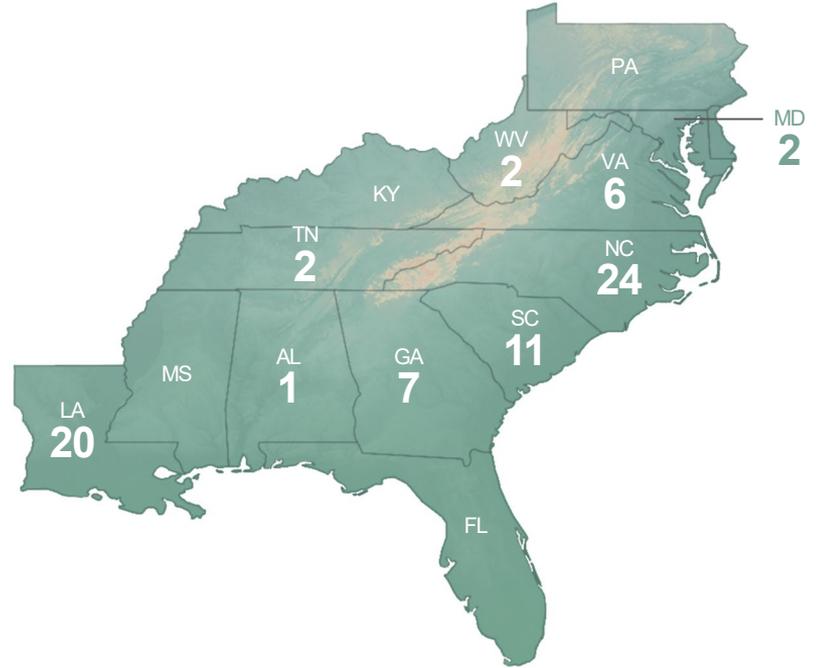
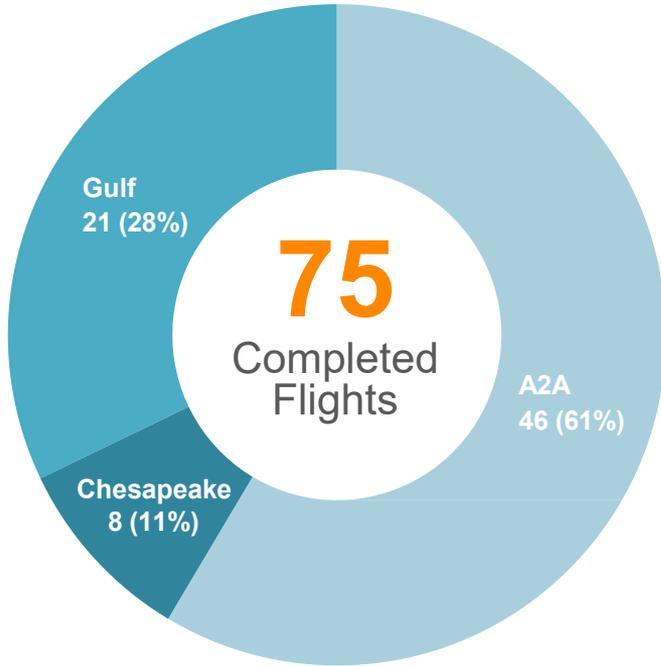
Thank you for standing with us as we share perspective.

With gratitude and hopes for good health,



Meredith Dowling
Executive Director

2021 Completed Flights by Program and State



Flights are designed to uncover environmental challenges and inspire lasting solutions. In 2021, SouthWings collaborated with our partners on a wide range of environmental issues, most often focusing on:



50%
Watershed Protection

© Will Parson



39%
Solving the Climate Crisis

© Julie Dermansky



39%
Wetland Protection

© John Moran



32%
Holding Polluters Accountable

© Jeffery Dubinsky



24%
Oil Industry Pollution

© Julie Dermansky



17%
Restoring the Mississippi River

© David Kidd



17%
Monitoring CAFOs (Concentrated Animal Feeding Operations)

© Peter Stauble



17%
Ecosystem Restoration

© Scott Eustis



5%
Cleaning Up Coal Ash

© Nancy Pierce

2021 Media Pieces Informed by SouthWings Flights

The Charlotte Observer

[Environmental Justice leaders awed by NC pig farms & landfill](#)

 **Audubon**

[One Good Turn Deserves Another](#)

york daily record
PART OF THE USA TODAY NETWORK

[Pennsylvania is failing the Chesapeake Bay](#)

 **nola.com**

[At least 350 oil and chemical spills reported in Louisiana waters after Hurricane Ida](#)

Sierra
THE MAGAZINE OF THE SIERRA CLUB

[From The Ashes: In search of a solution to the coal ash waste littering the American landscape](#)

ASHEVILLE
CITIZEN-TIMES

[Wildlife passage under I-40 in Pigeon River Gorge, 'excellent start' for bear, elk safety](#)

VICE News

[The Longest Running US Oil Spill You've Never Heard Of](#)

Sierra
THE MAGAZINE OF THE SIERRA CLUB

[Halting the Gas Export Boom](#)

 **DeSmog**

[Aerial Photos Of Hurricane Ida's Aftermath Show What 'Code Red' for the Planet Looks Like in South Louisiana](#)

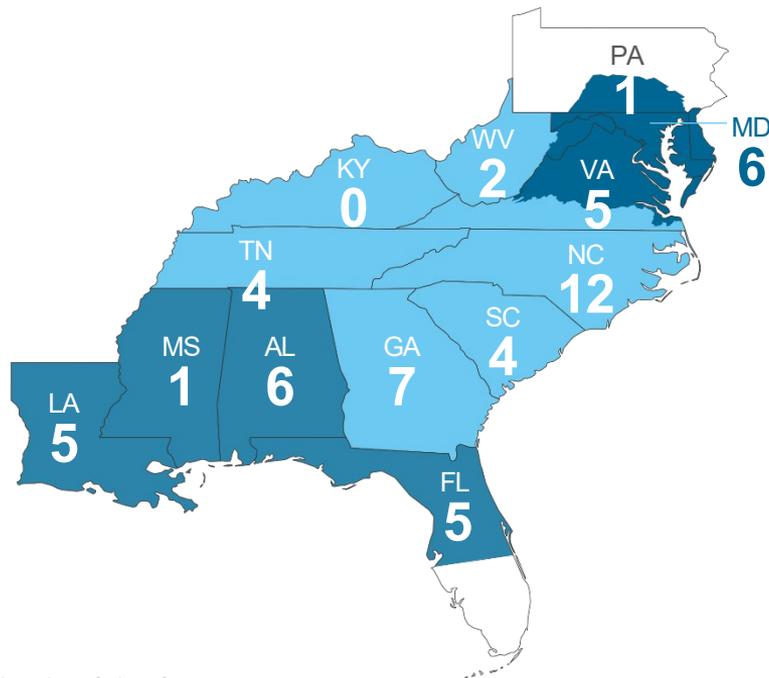
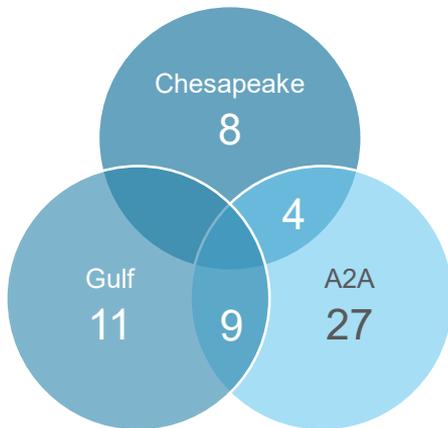
 **nola.com**

[For Louisiana's coastal tribes, 'being at the end of the earth is a dangerous place'](#)

Number of Pilots by Region and State

59

Active Volunteer Pilots in 2021



Region info based on distance volunteer is willing to travel. State info based on location of aircraft.

13

Volunteer Pilots joined SouthWings in 2021.

Appalachia to Atlantic

Joe Creecy (TN)

Richard Embry (NC)

Michael Henley (GA)

John Leder (NC)

Robert Searfoss (GA)

Micheal Spurgeon

(TN)

John Steward (GA)

Rankin Whittington

(NC)



Gulf

Les Abend (FL)

Mark A. (FL)

Mason Gaines (FL)

Christopher Noth

(FL)

Jared Savage (AL)

A note about passengers

In January 2021, due to the COVID-19 pandemic SouthWings remained on hiatus from passenger-carrying flights. Volunteer pilots continued to fly solo to capture photos and videos for flight partners as needed. SouthWings staff arranged eight pilot-only flights during this time.

In mid-March 2021, SouthWings staff surveyed volunteer pilots to gauge their willingness to fly with passengers and to find out what information pilots would like us to collect from potential passengers in order to feel comfortable having passengers aboard. The responses varied from “Not ready yet,” to “All passengers must be vaccinated and wear masks,” to “Ready to go, no concerns.” Based on these responses and in conjunction with the CDC’s easing of pandemic-related restrictions, we entered a beta test phase of offering passenger flights to a very limited group of well established partners. Five flights with passengers were arranged during this phase.

After feedback from the beta test phase confirmed that our volunteer pilots, staff, and partners were comfortable with pandemic-related adaptations to the flight request and coordination process, in mid-May 2021 SouthWings returned to accepting requests for passenger-carrying flights across the region. Throughout the summer and fall, flight requests returned to pre-pandemic levels. From mid-May through year end 2021, we arranged 62 flights.



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APPALACHIA TO ATLANTIC

Photo: Jake Faber

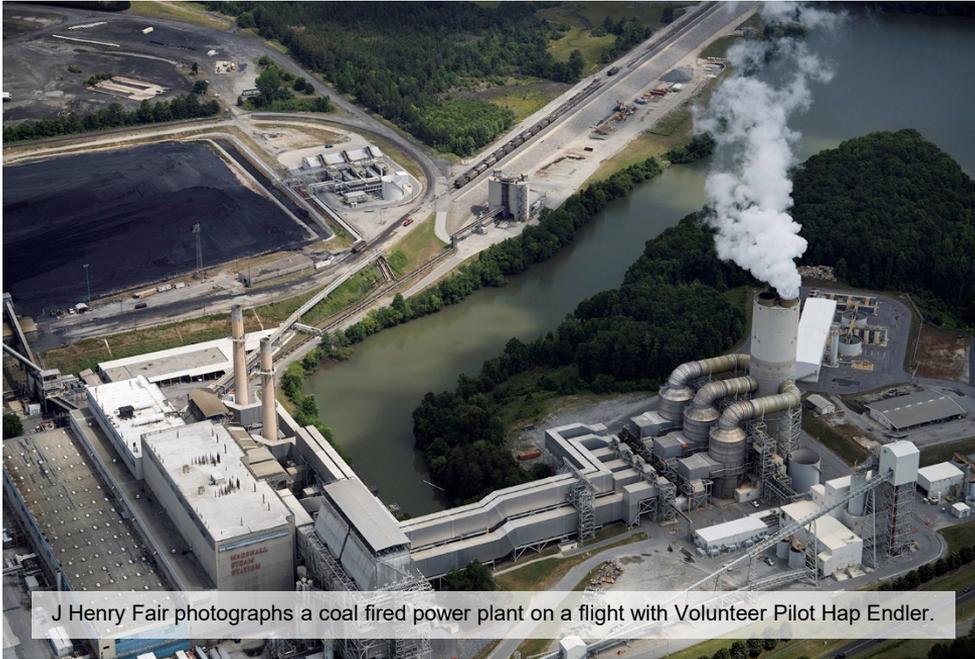
The A2A region spans five states, encompassing some of the most varied landscapes in the Southeast. From the scenic Blue Ridge Mountains to the historic Sea Islands of the Lowcountry, this region includes some of the most biologically diverse ecosystems as well as some of the fastest-growing cities in the country. Our volunteers in the A2A region support our partners in monitoring ongoing pollution concerns from coal ash and agricultural waste, advocating for the protection of wildlife habitat and cultural heritage sites, and educating decision-makers and the public about key issues facing communities across the region.



Cape Fear River Watch identifies a huge pile of uncovered animal waste on a flight with Volunteer Pilot Bill Kahn. Photo credit: Patrick Connell

North Carolina

This year, SouthWings has arranged 24 flights in North Carolina carrying 35 passengers along with several pilot-only flights. With the return of passengers, SouthWings was glad to resume supporting the work of our **Waterkeeper Alliance** partners in monitoring threats to North Carolina's waterways. **The Broad, Cape Fear, Dan, Haw, Pamlico-Tar, Waccamaw, Watauga and Yadkin Riverkeepers** have all flown this year. With the aerial surveillance made possible by flights with Volunteer Pilot Bill Kahn, **Cape Fear River Watch** has been able to submit eight complaints to DEQ dealing with poultry litter left out uncovered for greater than 15 days.



J Henry Fair photographs a coal fired power plant on a flight with Volunteer Pilot Hap Endler.

“Perfect! Seeing the perspective from above is a new introduction to the river, like seeing it for the first time. It is breathtaking. The view from above provided more info and pictures that I could gather in months on the ground.”

—Steven Pulliam, Dan Riverkeeper

The **Watauga Riverkeeper** flew over a large scale timber project in Allegheny County with Volunteer Pilot Holliday Obrecht to evaluate its impacts to neighboring streams and the Blue Ridge parkway. A monitoring plan was put in place to help protect the fragile ecosystem of the valuable native brook trout that live in those streams.

SouthWings was glad to fly with a new partner, **Good Stewards of Rockingham County/Dan Riverkeeper**, to monitor threats to the Dan River for the Waterkeeper Alliance’s **Pure Farms, Pure Waters** campaign. Three new areas of concern that were previously unknown to the organization were discovered on the flight with Volunteer Pilot Holliday Obrecht.

Coal ash is one of the greatest threats to clean water, as power plants often store their coal ash in unlined pits which easily seeps into nearby waterways. Photographer **J Henry Fair** flew with Volunteer Pilot Hap Endler to view coal fired power plants in North Carolina and bring awareness to this issue. One of Henry’s photos of coal ash, from a SouthWings flight that occurred many years ago, was featured on the cover of the [March/April 2021 issue](#) of the Sierra Club magazine.

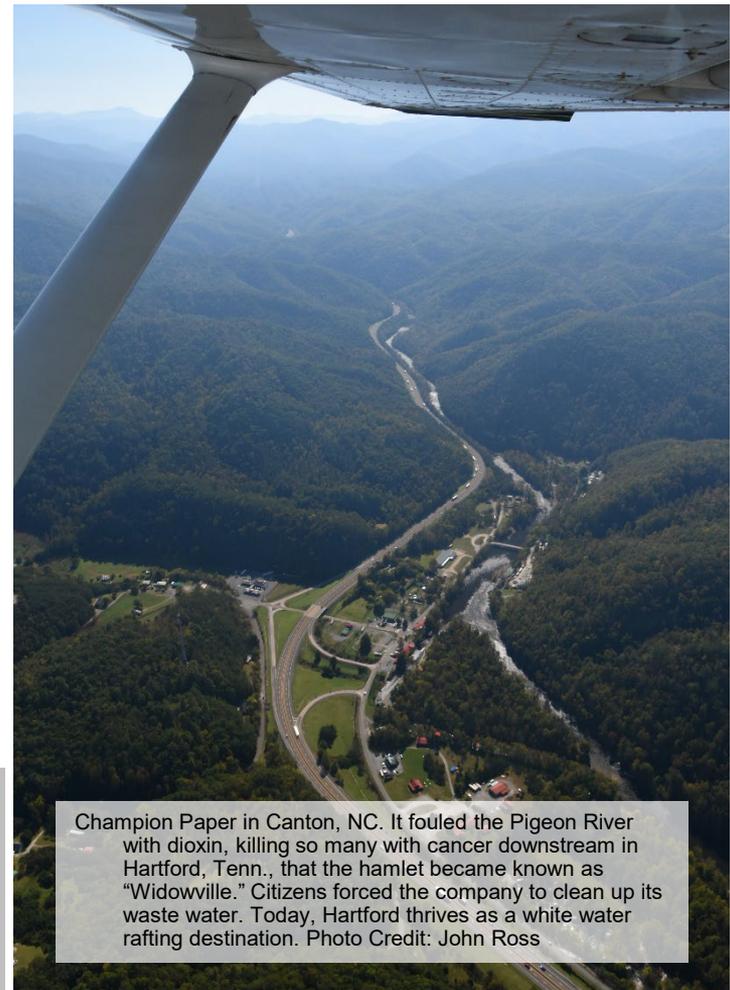
Our partnership continues with the **Pigeon River Gorge Wildlife Connectivity Collaborative**, who are working on improving wildlife connectivity through the heavily-trafficked I-40 corridor in the Great Smoky Mountains. Photos and video from SouthWings' flights in 2018 were used in media to celebrate the inclusion of a [wildlife crossing in the Harmon Den bridge replacement project](#).

A SouthWings flight is an invaluable orientation for those working to protect our waterways. This year, **RiverLink** welcomed a new executive director to lead the Asheville-based organization that stewards the French Broad River Watershed. She was able to take an aerial tour of the watershed from its headwaters in Western North Carolina to its mouth in Tennessee with author and historian John Ross.

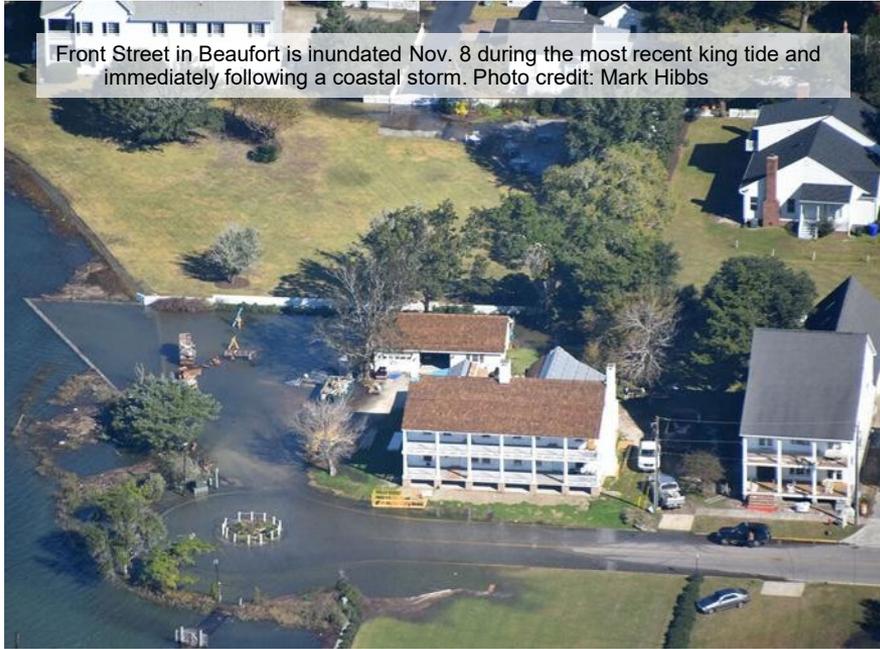
This year, John Ross published [Through the Mountains: The French Broad River and Time](#), a journey through the French Broad River watershed from the mountains of North Carolina to the mouth in Knoxville, TN. In 2018, John Ross flew with SouthWings to research and photograph while writing his book. He will be featuring photos from this year's flight with Volunteer Pilot Hap Endler in a course he will be teaching on the French Broad River watershed's natural and human history for Osher Lifelong Learning Institute at UNC Asheville in January 2022.

"It was an incredible experience. I have done similar flights in Colorado and Utah, but I recently moved here to take this Executive Director position. So, to see the region and watershed from the air was incredible. I am going to encourage everyone affiliated with our organization to consider such an approach to seeing the area."

—Lisa Raleigh, RiverLink



Champion Paper in Canton, NC. It fouled the Pigeon River with dioxin, killing so many with cancer downstream in Hartford, Tenn., that the hamlet became known as "Widowville." Citizens forced the company to clean up its waste water. Today, Hartford thrives as a white water rafting destination. Photo Credit: John Ross



Front Street in Beaufort is inundated Nov. 8 during the most recent king tide and immediately following a coastal storm. Photo credit: Mark Hibbs

This fall, researchers and coastal resilience professionals working with **NC King Tides Project** participated in a series of flights with Volunteer Pilot Bill Kahn along the North Carolina Coast to document the current effects of rising sea levels such as salt intrusion, flooded habitats, and proximity of flooding to build environment. Aerial photos will supplement [on-the-ground photos of flooding](#) to demonstrate what future sea levels will look like based on today's "king tide" events.

In October, Volunteer Pilot Bill Kahn assisted the **Cape Fear River Watch** in showing members of the **White House's Environmental Justice Advisory Council** the largest landfill in the state, wood pellets plants, hog farms and poultry farms. This flight was in conjunction with a panel discussion commemorating the 30th anniversary of the First National People of Color Environmental Justice Leadership Summit. *"Going up on the plane, on the four-passenger plane and taking a broader sweep at it not from the bottom up but from the top down — just the incredible, incredible, incredible what I'll call injustice that's taking place to people here,"* Richard Moore, co-chair Environmental Justice Advisory Council.

"Observing the high water/King Tides from 1,500 feet was an incredible new experience to understand the extent of inundation of roadways and coastal marshes."

-Daniel Tomczak, North Carolina Association of Floodplain Managers

It's always rewarding to see flight results occur months or even years after the actual flight took place.

In 2020, Volunteer Pilot Steve Rhode flew a pilot-only mission for **Sound Rivers** who requested photos of the site of a proposed landfill to be used as testimony in front of the Vance County Board of Adjustment about the potential environmental and public health impacts of the landfill. In January 2021, the board ruled against the landfill, which would have been dangerously close to a tributary of the Tar River, citing that it would not promote health and safety nor be used “in harmony with the community”. Photos from the flight were published in [this story](#) from NC Policy Watch.

In 2019, SouthWings provided support to **Defenders of Wildlife** to document threats to red wolf recovery efforts in the Alligator River National Wildlife Refuge, the last place where this species roams wild. This May, the Southern Environmental Law Center won a case on behalf of Defenders to get eight endangered and captive red wolves released in to Eastern North Carolina.



Site of a proposed landfill in Kittrell, Vance County NC. Photo credit: Volunteer Pilot Steve Rhode

South Carolina



SouthWings continues working in South Carolina with 11 completed flights in 2021. All of these flights were pilot-only missions except for one flight carrying one passenger. **Cornell Lab of Ornithology** needed a flight over the ACE Basin (Ashepoo, Combahee, and Edisto Rivers) National Wildlife Refuge to study the nocturnal roost for a declining, migratory shorebird. Despite several changes in schedule due to weather, Volunteer Pilot Art Falk was able to fly the researchers and help them capture the photos and video they were hoping for.

SouthWings is happy to continue supporting the work of **Audubon South Carolina** in restoring the key nesting island of Crab Bank in the Charleston Harbor. Though this project was on pause for nearly a year due to the pandemic, Volunteer Pilot Jon Engle resumed flights for this project in Fall 2021 using precise overhead photogrammetry and 3D area measuring capability to measure the actual growth of the chain of islets. Restoration was completed near the end of 2021, and successfully grew the island to 32 acres. Volunteer Pilot Jon Engle's photographs were featured in [multiple media pieces](#) celebrating the collaborative project.

SouthWings continues to support the protection of the South Carolina coast from overdevelopment and other environmental stressors. This year, SouthWings supported **South Carolina Coastal Conservation League** in documenting Cainhoy Peninsula to support their advocacy to stop a planned suburban development.

Volunteer Pilot Jon Engle also flew to capture images of the salt marshes for the **Gullah/Geechee Sea Island Coalition** to support resilience planning in Beaufort County and Edisto Island.

Photos from a pilot-only SouthWings flight by Volunteer Pilot Chris Carmel will help **South Carolina Environmental Law Project (SCELP)** in their efforts to protect Waites Island, the only undeveloped barrier island in Horry County. Landowners have been working with the SC DNR to protect the land in perpetuity through a State Heritage Preserve, and SCELP is representing the landowners in a lawsuit that has thrown a hurdle in the process.



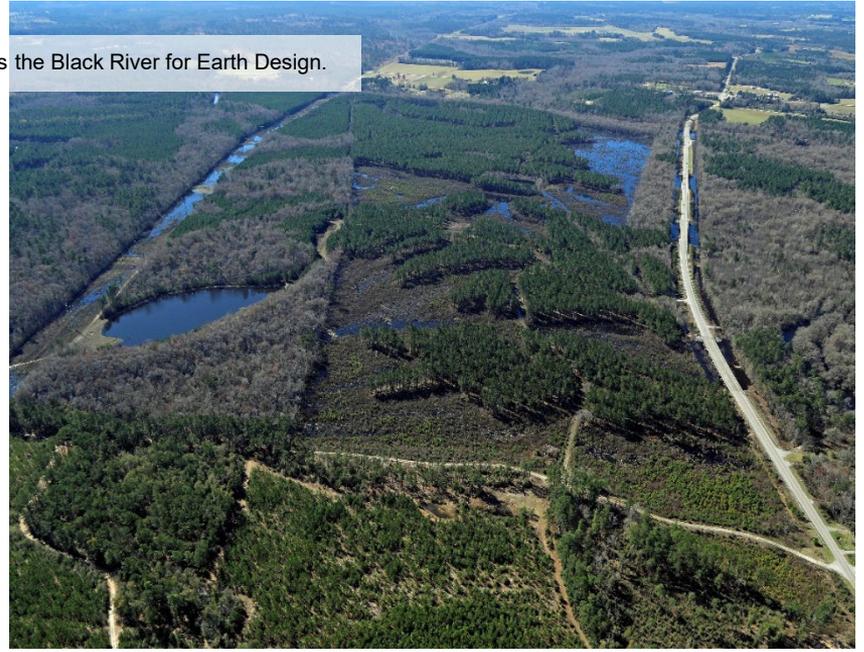
Juxtaposition of developed North Myrtle Beach and undeveloped Waites Island, SC. Photo credit: Volunteer Pilot Chis Carmel

“The photos of the area really show the stark difference of the developed side [North Myrtle Beach] compared to the pristine natural beauty of Waites. These photos clearly show why this unique barrier island should remain undeveloped and protected.”

– Lorraine Chow, SCELP



Volunteer Pilot Jon Engle photographs the Black River for Earth Design.



SouthWings is excited to be partnering with the **Open Space Institute** and **Earth Design** as they work to transform and preserve 172 miles along the Black River. Volunteer Pilot Jon Engle flew two solo flights to capture video and photos of the area which will help Earth Design develop a master plan for the corridor. Included in the plan will be access ramps to the river, a state park with RV camping and a visitor center, and walking, hiking and biking trails.

"These photos are very valuable in providing an easy way to view the entire corridor at once. I've been super impressed [by Jon] so far."
-Michael Ethridge, Earth Design



Okefenokee National Wildlife Refuge. Photo credit: Volunteer Pilot Chris Carmel

Georgia

Seven flights were arranged in Georgia this year. Six of these flights carried a total of nine passengers and one flight was pilot-only.

SouthWings is still lending support to the fight against the proposed titanium mine next to the Okefenokee Swamp. In January, Volunteer Pilot Chris Carmel flew a pilot-only flight for the **Georgia River Network** and the **Suwanee Riverkeeper** to take photos and determine if any land disturbance had occurred before permits were granted. SouthWings also facilitated a flight over the Okefenokee for **Picture Window Productions, LLC** to capture aerial footage for an educational documentary, and another flight for the **Southern Environmental Law Center** to survey for ditches, canals and hydrologic connectivity surrounding the swamp. SouthWings is continuing to participate in the **Okefenokee Protection Alliance** and offer support as needed.



A "ghost forest" in Georgia caused by rising sea levels. Photo credit: Teake Zuidema

Coastal Georgia is rife with reminders of the destruction caused by rising seas. Photographer Teake Zuidema flew with Volunteer Pilot Chris Carmel to document effects of sea level rise for his story [“A Stark View of Rising Seas in Georgia”](#) published by **Nexus Media News**. The story also ended up getting picked up by **Discover Magazine**.

This April, SouthWings attended the virtual awards ceremony for the **Georgia Water Coalition’s [Clean 13 Award](#)**, which we were honored to receive last year. The Clean 13 Report acknowledges efforts on the part of businesses, industries, local governments, non-profit organizations, and individuals to protect the water and natural resources of Georgia.

“It’s always exhilarating to get up there. The view from above just gives you a deeper insight how things on earth are connected to each other, both in a scientific and emotional way. I can clearly see how some coastal areas are overrun by construction and on the other hand I could observe from the air that on the not-inhabited barrier islands many trees in the lowest laying areas are dying because of the salt water.”

-Teake Zuidema, Freelance Photographer



Oil sheen from the capsized Golden Ray in St. Simon's Sound. Photo Credit: Sue Inman, Altamaha Coastkeeper



Rayonier Paper Mill bordering the Altamaha River. Photo Credit: J Henry Fair

Many eyes have been diligently watching the clean up efforts on the capsized Golden Ray cargo ship. This year, the response team was able to complete the removal of the ship from the St. Simons Sound. The salvage effort has been riddled with setbacks, including a fire on board the ship, and a dangerous amount of oil has leaked into St. Simon's Sound, affecting the nearby waterways, beaches and marshes. In April, the **Altamaha Riverkeeper** flew with Volunteer Pilot John Cowlshaw to observe the extent of the oil spill. Currently, Altamaha Riverkeeper is advocating for a comprehensive environmental damage assessment. Photographer **J Henry Fair** also flew in Georgia to photograph sources of pollution in the Altamaha River Basin, including the Rayonier Paper Mill, whose waste treatment pond is adjacent to the Altamaha River.

SouthWings is proud to support Waterkeepers across our region. In December, Volunteer Pilot Les Abend provided an aerial orientation of their watersheds to the new **St. Marys Riverkeeper** and new **Satilla Riverkeeper**.

West Virginia

SouthWings has flown two flights with three passengers in West Virginia in 2021. **Coal River Mountain Watch** requested a flight to observe activity on the Bee Tree Mine on Coal River Mountain. Photos from the flight were used at a public hearing on the renewal of the mining company's permit to garner public support and increase opposition of the mine.

SouthWings also continues to support partners in the fight against the Mountain Valley Pipeline. **West Virginia Rivers Coalition** flew with Volunteer Pilot Scott Simonton to monitor stream crossings planned for the Mountain Valley Pipeline. They used the information and visuals gathered in educational materials to inform public comments opposing stream crossing permits.



Volunteer Pilot Scott Simonton flies Coal River Mountain Watch over the Edwight mountain top removal site which has been in "reclamation only" status for over five years. It remains un-reclaimed. Photo credit: Vernon Haltom



Alliance for Appalachia members with Volunteer Pilot Joe Creecy.

Tennessee

SouthWings completed two flights carrying a total of four passengers in Tennessee this year. Volunteer Pilot Micheal Spurgeon fulfilled an urgent flight request from the **Tennessee Riverkeeper** following heavy rainfall and flash flooding in middle Tennessee in August. They were able to learn a lot about pollution sites they have been monitoring.

The **Alliance for Appalachia** is working on a video project to highlight members discussing important legislative measures for the region. Interviews will be combined with aerial footage of the coal supply chain (including surface mines, fossil fuel plants, and coal ash disposal sites) obtained on a SouthWings with Volunteer Pilot Joe Creecy flight this summer.



CHESAPEAKE BAY

The Chesapeake Bay Conservation Flight Program encompasses the Chesapeake Bay watershed within Virginia, Maryland, Delaware, the District of Columbia, and southern Pennsylvania. The area is vast and covers nearly 64,000 square miles – from mountain stream headwaters, through ecologically rich forests and productive agricultural lands, to the mouth of the largest estuary in the nation. Flight work reveals challenges related to water quality, climate change, and coastal resilience, energy extraction and infrastructure, and land conservation.



Conowingo Dam on the Susquehanna River. Photo credit: Will Parson, Chesapeake Bay Program.

As we continue to adjust to COVID safety guidelines, SouthWings is working to strengthen relationships in the Chesapeake Bay region. Although no flights have been arranged in Pennsylvania or Delaware this year, SouthWings continues to network with our established partners and make in-roads with new conservation organizations in the region.

SouthWings continues to engage with the **Virginia Conservation Network** and the **Choose Clean Water Coalition** and looks forward to supporting the important work of the networks' members in the coming year.

SouthWings is in conversation with **PennFuture**, **Waterkeepers Chesapeake**, and others to explore potential ways that SouthWings can help their initiatives.

Maryland

SouthWings completed two flights carrying a total of three passengers in Maryland in 2021. Longstanding SouthWings partner, Kathy Phillips has transitioned to Executive Director of the **Assateague Coastal Trust** and is training the new Assateague Coastkeeper. In November, SouthWings coordinated an orientation flight where Kathy was able to show Gabby sites of interest in Virginia, Delaware and Maryland, and the big picture of the watershed they work to protect. On the flight with Volunteer Pilot Ron Baker, they were also able to gather photo evidence for a possible Clean Water Act violation.

SouthWings also coordinated a flight for the **Chesapeake Bay Program's** multimedia specialist. He was able to document underwater grasses in the upper Chesapeake Bay, and capture photos of land use along the Susquehanna River to the Conowingo Dam. Photos from this flight will be used for presentations on topics like livestock stream fencing, forest buffers, and farming practices.



Kathy Phillips with the new Assateague Coastkeeper, Gabby Ross ready for the birds eye view of the watershed thanks to Volunteer Pilot Ron Baker.

"It was truly enlightening to see how much water there is on the shore within my watershed area. I learned how everything is connected and got to see the problem areas from a birds-eye view. It allowed me to get a different perspective of what exactly to look for and be aware of when the time comes to pinpoint sources of pollution and degradation."

-Gabby Ross, Assateague Coastkeeper

Virginia

In 2021, SouthWings completed six flights in Virginia carrying a total of six passengers.

Piedmont Environmental Council flew with SouthWings in August to gain an aerial perspective and capture photos and video of the proposed development at Wilderness Crossing in Orange County, VA. It is the largest development proposal in the region in years, with 2600 acres of historic battlefields, farmland, and forest along the Rapidan River that would be turned into single-family homes. The flight with Volunteer Pilot John Sapienza resulted in two blog posts and [a story map](#) conveying the enormous scale of the project and the environmental concerns.

SouthWings coordinated a second flight for Piedmont Environmental Council in October to obtain aerial images of rural Loudon County and several harmful development projects, which they will use to advocate for better land-use decisions locally.





Tangier Island. Photo credit: J Henry Fair

“Flying is central to my work, and SouthWings has been a longtime and critical partner in this effort. I believe that only by seeing the world from above can we tell the stories that will make people care about protecting the natural world on which we depend. I know that the pilots are all volunteers, and I am always deeply grateful for their commitment and caring.” —J Henry Fair



Cat Point Creek, Norfolk, VA. Photo credit: J Henry Fair

Photographer **J Henry Fair** flew along the coast of Virginia with Volunteer Pilot Dave Brubaker to photograph the effects of sea level rise. Henry is working on a project to document the “current status” of the Virginia coast regarding sea level rise and climate change impacts, including beautiful wild scenery of the Rappahannock River and Blackwater National Wildlife Refuge, military sites, Tangier Island, and others.



The Susquehanna River. Photo credit: Volunteer Pilot Bill Kahn

Pennsylvania

While SouthWings has yet to arrange a flight in Pennsylvania in 2021, the **York Daily Record**, part of the **USA Today Network** did publish [“Killing the Chesapeake”](#) in February. Volunteer Pilot Bill Kahn flew several flights in 2020 to capture photos and video that informed this story. With the Susquehanna River badly polluting the Chesapeake Bay, this story urges Pennsylvania to clean up the watershed and protect the people and animals who depend on the Bay. It’s a dire situation and SouthWings is committed to helping our partners come up with a sustainable solution.

“Pilot Bill Kahn was outstanding. Great guy, very informative, very open to experimenting and learning how to help us accomplish our goals.”

—Scott Fisher, USA Today



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GULF OF MEXICO

Photo: Virginia Richard

The Gulf region is as rich in biodiversity as beauty. Encompassing prairies, marshes, swamps, hardwood forests, and more, this region is an undervalued national treasure. The Gulf is at a crossroad with staggering environmental and environmental justice issues. As the climate crisis worsens, frontline communities are turning the tide toward a just transition from petrochemical industries to a cleaner, healthier, and more equitable future. SouthWings is proud to follow their leadership.



Straight oil and gas canals cut through wetlands causing saltwater intrusion and wetland deterioration. Photo credit: Ken Knevel

Louisiana

Flights began to climb back up early in 2021 after a very difficult 2020, with a strong mix of pilot-only and passenger flying. Our very first flights of the year monitored the **Taylor** oil leak, which has been ongoing since Hurricane Ivan in 2004, and changes in the landscape around the Mississippi River due to water movement. Both flights would be indicative of developments in the year ahead: a major victory against **Taylor Energy** and the life and landscape-altering damages from **Hurricane Ida**, driven by **climate change**.

In the summer of 2010, SouthWings began flying the infamous **BP/Deepwater Horizon** disaster in the Gulf of Mexico. Our partners at **SkyTruth** who use satellite imagery to monitor pollution [noticed a nearby slick](#) in April and May of that year.

Because oil spills and leaks in the Gulf of Mexico are largely self-reported and policed (unless watchdogs get involved), the [Interior Department's records showed that the leak averaged less than 1/3 of a barrel of oil a day, or only about 14 gallons. Based on the sheen, SkyTruth estimated the rate to be closer to 100-400 gallons a day, every day, for six years.](#)

Thus began a cooperative endeavor between **SouthWings** and several partners such as photographer **J Henry Fair**, **SkyTruth**, **Healthy Gulf (formerly Gulf Restoration Network)**, **Waterkeepers Alliance**, **Vanishing Earth**, and more, spanning over a decade.



Leaking oil from the BP/Deepwater Horizon disaster. Photo credit: John Wathen

"It means a lot that we can cover the vast ocean that the national groups depend on us to cover. The information on what is happening in Mississippi Canyon has priceless lessons for national policy, especially right now, when so much is on the line...we will continue to watchdog and support the government's response and operations [in regard to the Taylor oil leak], no matter the administration."

-Scott Eustis, Healthy Gulf



This 2016 photo of part of the sheen caused by the Taylor leak was considered “exclusive” due to how few organizations were covering it at the time. Photo credit: Scott Eustis, Healthy Gulf

“It is critical that we are able to check up on sites like Taylor, and we wouldn’t be able to do it without SouthWings.”

-Naomi Yoder, Healthy Gulf

In April 2011, SouthWings joined with SkyTruth and the Waterkeeper Alliance to form the [Gulf Monitoring Consortium](#). The Consortium was formed to “fill the information gap exposed since the tragic BP/Deepwater Horizon explosion” and report pollution that otherwise went unnoticed or underreported. **Gulf Restoration Network (now Healthy Gulf)** joined the Consortium after its founding.

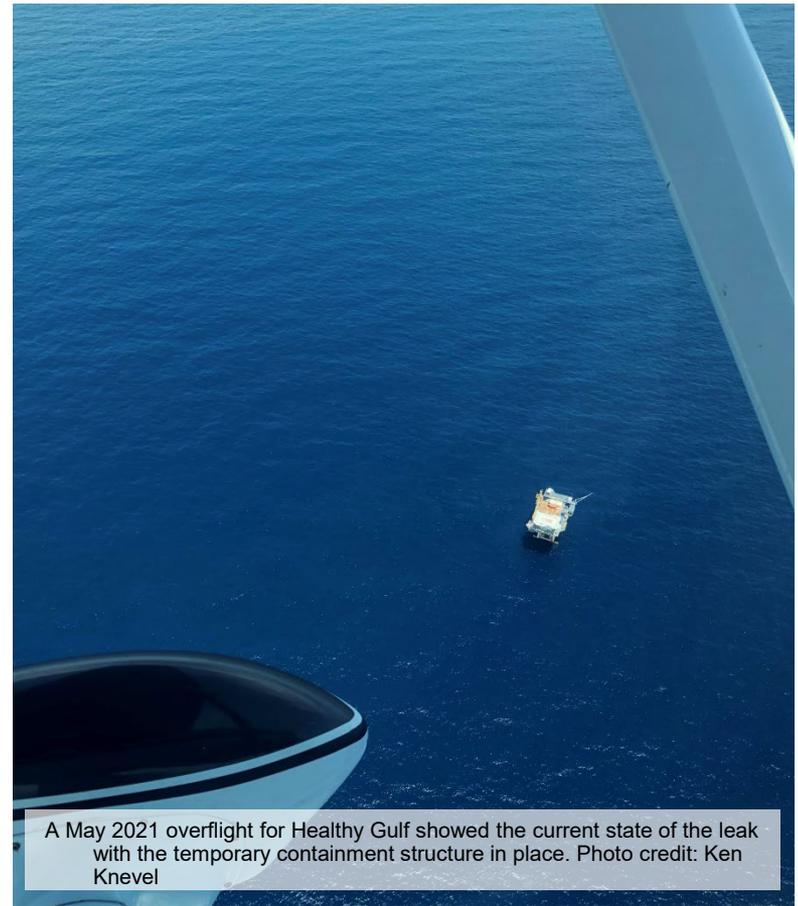
In 2018, twenty-four flights later, the leak made the **front page of the [Washington Post](#)** and featured photos from a SouthWings flight with Healthy Gulf. At this point, it was estimated to be releasing up to 700 barrels or 29,400 gallons a day. The cumulative leak since 2004 was estimated at 1.5 million barrels to 3.5 million barrels of oil total. The day after the Washington Post published its story on Taylor Energy’s leak, the [United States Coast Guard took action to force Taylor to clean up its mess.](#)

Taylor Energy fought in the courts against taking responsibility. Still, Couvillion Group successfully created a floating cap to collect most of the leaking oil and bring it to land for processing and sale. The amount collected from the underwater “volcano” as Timmy Couvillion called it, proved that the **Gulf Monitoring Consortium** was right about the large scale of the leak.

From 2019 to present, SouthWings has provided 11 more flights, most recently on October 31, 2021, to monitor the progress and support our partners' work for a permanent solution. In April, **VICE News** published a [video report](#) featuring images from **Healthy Gulf** and SouthWings, which also touched on the flurry of lawsuits put forth by Taylor to avoid responsibility.

After 36 completed flights, over 11 years, with 11 different pilots, Taylor Energy decided it was no match for dedicated groups like **Healthy Gulf**, **SkyTruth**, **SouthWings**, and more. On December 23, 2021, Taylor Oil Co. agreed to a settlement which required them to drop their remaining lawsuits, hand over a \$432 million trust fund for cleanup efforts, and pay \$43 million additional dollars. The [proposed consent decree](#) is now in its 40 day public comment period before being finalized by a judge.

This is a major victory on the **road to a permanent solution**. SouthWings continues to fight alongside our steadfast partners, not just for a resolution to this leak, but to an end of all pollution by petro-chemical industries.



A May 2021 overflight for Healthy Gulf showed the current state of the leak with the temporary containment structure in place. Photo credit: Ken Knevel

“The flight was an important piece of our coalition’s media and outreach campaign that culminated in victory: the New Orleans City Council unanimously passed a resolution opposing Formosa Plastics and environmental racism across Cancer Alley.”

-Kate McIntosh, Program Coordinator of Louisiana Bucket Brigade



The Gulf of Mexico is not the only place where SouthWings flies to hold **polluters accountable**. Communities in Louisiana’s **Cancer Alley**, the area along the Mississippi River between Baton Rouge and New Orleans, filled with petrochemical plants and the cancer rates to match, are fighting the buildout of a massive **Formosa Plastics** industrial complex. If built, the 2,400 acre complex would emit 13.6 million tons of greenhouse gases, exacerbating climate chaos. It would also add 800 tons of air pollutants annually to a primarily Black area already overburdened with health issues and deaths due to environmental racism. SouthWings continues to fight this build out with community leaders like **RISE St. James** and **Louisiana Bucket Brigade**.

In February, Volunteer Pilot Ken Knevel flew over Lac des Allemands, a **critical catfish habitat** that is downstream of the proposed Formosa site. His images were used in a [successful campaign to get New Orleans City Council to pass a resolution against Formosa](#). Louisiana Bucket Brigade, among others, lead the media campaign and requested the flight.

SouthWings carried out multiple other strategic flights in Cancer Alley, both before and after **Hurricane Ida**, for legal reconnaissance and for education of influential individuals and stakeholders. Continued pressure by community coalitions on decision-makers paid off in mid-August, when the [US Army Corps of Engineers ordered an environmental review of the Formosa project.](#) A couple of weeks later, Hurricane Ida devastated the area, allowing the release of massive amounts of pollution and driving home the **need for meaningful climate action**. While many residents have lost everything, they are determined to continue fighting environmental racism in the form of policies and projects like Formosa. And SouthWings will continue to fight alongside them.

“SouthWings has provided an invaluable service to Earthjustice in its representation of environmental and community groups who are fighting the chemical buildout in Cancer Alley, among other things. SouthWings was able to provide aerial photos of targeted sites that show details regarding various features and activities that are often impossible to see from the ground. While Google satellite imagery is a useful tool for viewing site features, those images are often outdated. SouthWings is able to provide current photos that are extremely useful in public advocacy and litigation.”

-Corinne Van Dalen, Earthjustice Attorney



Industry and homes, often next to each other in Cancer Alley, sit in polluted water after Hurricane Ida. Photo credit: Scott Eustis, Healthy Gulf





LNG infrastructure is being built at breakneck speeds in SE Louisiana. Photo credit: Julie Dermansky



Despite four devastating climate change-related disasters in a short amount of time: **Hurricanes Laura and Delta** which demolished many homes, a subsequent **hard freeze**, and then **flooding**, the liquid natural gas export industry, considered to be one of the last saviors of fossil fuel industries, along with plastics, is booming in Southwest Louisiana. At a time when many people are still homeless and/or struggling for basic necessities, industrial build-out is taking place at breakneck speeds.

A growing group of community-led activists are sounding the alarm and fighting back. On August 11, SouthWings flew long-time partner and **photojournalist Julie Dermansky** to document the expansion. Her work is featured in the Sierra Club's quarterly magazine, [Sierra](#), as part of a feature length article by **2020-2021 Bertha Fellow in Investigative Journalism, Antonia Juhasz** about the effort to stop the buildout.

"It was a great flight-- I got to see how much things have changed since the last time I was up in that area. As a reporter it is key to see stuff for myself-- so the experience is awesome as it enriches my knowledge of the situation."

-Julie Dermansky, photojournalist



Hurricane Ida came ashore on the 16th anniversary of **Hurricane Katrina**, a fact that did not escape Southeast Louisiana. While Ida has not been covered as extensively in the media as Katrina was because the affected areas to the south of New Orleans are more rural, the level of devastation it brought was quite similar to its predecessor. Similarly, it immediately became a measurement of time, with life being divided up into pre- and post-Hurricane Ida. As of early 2022, many coastal residents are still without permanent shelter and basic infrastructure, especially Indigenous communities. As one SouthWings partner remarked, all flights to the area now will essentially be considered post-Ida flights because of how the storm changed the human and physical landscape.

The SouthWings team worked together through the evacuation and temporary displacement of the Gulf Program Manager, aviation gas shortages, presidential no-fly zones, spotty communication infrastructure, and innumerable challenges for our partners on the ground (road closures, lack of power, gas shortages, extreme heat, lack of internet/cell service, COVID, etc.) to complete three flights in the immediate aftermath. We completed six additional flights in the following two months.

“I’ve always known this but everything really is connected: those oil spills out there, and that vegetation that’s been damaged and destroyed by some natural disasters, but also oil and also salt water intrusion, it’s all connected to the vulnerability of our communities.”

-Dr. Tammy Greer, United Houma Nation Citizen



A swath of industry sits in marshy land in the United Houma Nation territory in SE Louisiana.
Photo credit: Dr. Tammy Greer

These **nine flights** represented **over 15 different organizations**, including **United Houma Nation, Meraux Foundation, DeSmog Blog, New Orleans Advocate, Healthy Gulf, Another Gulf is Possible**, and more. Of these, we tried to center BIPOC communities and have Indigenous self-representation to the media. One passenger, [Dr. Tammy Greer, a citizen of United Houma Nation](#) and a professor at University of Southern Mississippi, flew with members of the media and took photographs of UHN territory for tribal and partner use. Because seats on flights were limited, we also encouraged passengers and planning organizations to freely share information and photographs, which resulted in **organizational networking, scientific research**, many **media reports**, multiple **pollution reports**, and **aerial assessments** of coastal **restoration** projects, as well as **damages**.

SouthWings is proud to provide flight support for **scientists** and organizations studying the hydrology of South Louisiana for **restoration** and **sedimentation-monitoring** purposes. One such partner, **Dr. Alex Kolker of the Louisiana Universities Marine Consortium (LUMCOM)**, studies Mardi Gras Pass. The pass is a free-flowing distributary of the Mississippi River which was naturally created by floodwaters' breach of one of the river's natural levees during the Mardi Gras season of 2012. Mardi Gras Pass affords scientists the rare opportunity to study the movement of sediment, freshwater, and nutrients into the river. **Healthy Gulf** shared images from their surveillance flights with Dr. Kolker to benefit his research.

The hydrological dynamics of the Mississippi River are a wealth of information for scientists and coastal restoration organizations. Photo credit: Dr. Alex Kolker, LUMCON



“In 2019 and 2020 there were high river floods which, from satellite imagery, look to have changed the landscape in and around the Mississippi River's Bird's Foot Delta. This flight gave us a chance to really see what those changes look like in real time which is critical information as we think about how we better manage the Mississippi River for the people of Louisiana and move efforts to restore Louisiana's coast forward.... There's been some pretty major changes in the lower part of the river.”

-Alisha Renfro, National Wildlife Federation

Mississippi, Alabama, and Florida

SouthWings provided legal flight support for one of our established partner organizations in Alabama in 2021 and is in the planning process for continuing that support in 2022.

We are currently networking with organizations across the program area to build partnerships and increase flights in the coming year.

“We did it and everything went well. Virginia you were right on top of a short notice request, and Bryan you gave me exactly what I needed in the air.”

-Nancy Pierce, photographer for Southern Environmental Law Center



Plant Barry in Mobile County, Alabama is a coal- and natural gas-fired electricity generation plant. Photo credit: Nancy Pierce