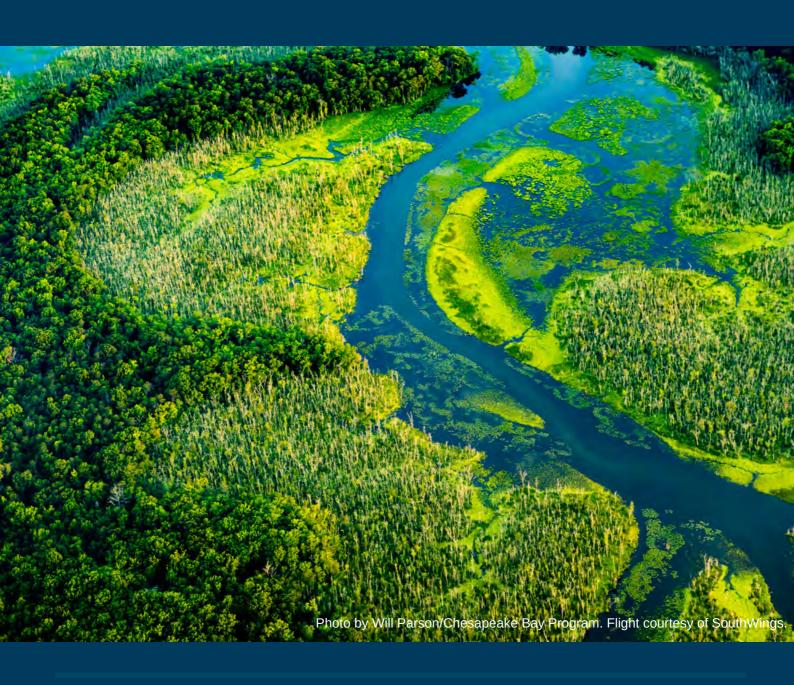
SouthWings 2022 PROGRAM REPORT





ABOUT SOUTHWINGS

SouthWings partners with conservation groups, community groups, media, and decision-makers to provide a unique perspective to better understand and solve pressing environmental issues in the Southeast.

SouthWings advocates for the restoration and protection of ecosystems across the Southeast through flight.

MISSION AND VISION

The mission of SouthWings is to protect and restore ecosystems of the Southeast through flight.

SouthWings envisions the Southeast as a landscape of healthy communities that value and cooperatively steward our natural, cultural, and economic resources.

SouthWings helps ensure that the region's unique identity and globally significant biodiversity are held in trust for current and future generations.



Photo by Jake Faber. Flight courtesy of SouthWings Volunteer Pilot Hap Endler.



ISSUE HIGHLIGHT: WOOD PELLET BIOMASS

Clearcutting of forests is an issue for which the shear magnitude of the destruction is revealed from the air. SouthWings flights have been documenting the extent of clearcutting in the Southeast since the early days of the organization. In recent years, the demand for wood pellets as a form of biomass fuel has driven expedited harvesting of both farmed timber and natural hardwood forest eosystems. Despite claims from the wood pellet industry that burning wood pellets for energy is a climate change solution, the process has many negative environmental impacts from harvesting to processing to burning.



Enviva Southampton wood pellet plant near Franklin, VA. Photo by Dogwood Alliance, March 2022. Flight courtesy of SouthWings.

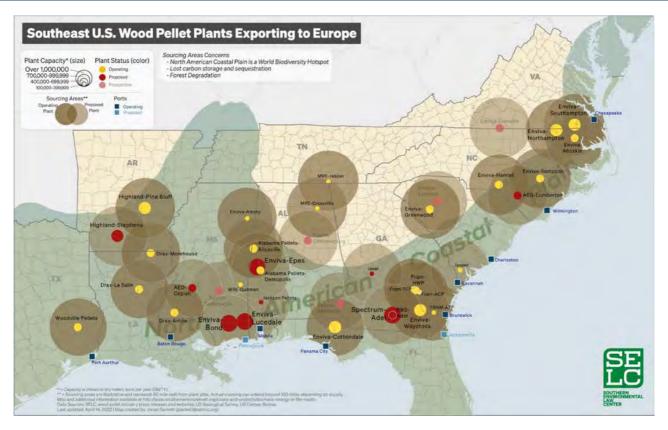
When natural forest communities are destroyed across the Southeast, there is a release of carbon dioxide into the atmosphere in addition to loss of carbon sequestration abilities. Clearcutting also contributes to water quality issues by releasing sediment to nearby streams and eliminating the flood control services of forests and forested wetlands.

The facilities that manufacture the wood pellets also present air quality concerns for nearby communities, furthering environmental justice issues. There are currently over 30 operating or proposed pellet mills within our region. Burning wood pellets produces more carbon emissions per unit of energy than coal.

...many of these trees are taken from clearcuts of ecologically valuable and highly biodiverse natural upland and lowland hardwood forests, including bottomland hardwood and other wetland forests.

-SELC Biomass Study, 2022





SouthWings flights have shed light on harmful practices by helping grassroots organizations document the logging operations that source local pellet mills (including multiple flights with the Dogwood Alliance in northeastern NC and investigations of Drax plants in LA and MS with the National Wildlife Federation in 2018) and engage both local and international media (including a BBC docu-series in 2018 and reporters from the UK in 2020.)

Save Our Saluda has participated in three flights over the years, and on the most recent flight, they noted a significant increase in clearcuts around the Enviva facility in Greenwood, SC since 2020.

SouthWings has also joined our partners in advocating for protection of forests and communities by signing on to comments for an air permit application from the Spectrum Energy facility in Adel, GA and a letter asking the Biden administration to carefully consider the threats of the wood pellet biomass industry. Most recently, we joined partners in a letter calling on the Netherlands to put an immediate end to burning wood pellets for energy. A month later, the Dutch Parliament enacted a permanent moratorium to subsidies for the wood pellet industry.



Clearcut near Lake Greenwood in SC. Enviva is the world's largest pellet producer and is looking to expand the Greenwood plant. Photo by Melanie Ruhlman, Save Our Saluda. Flight courtesy of SouthWings Volunteer Pilot Woody Beck.



ISSUE HIGHLIGHT: LIQUID NATURAL GAS



The Freeport LNG export facility sits on Quintana Island, surrounded by water. In June, there were explosions at the facility, which alarmed residents who believe the company has not been transparent in communications and the government has not been responsible in regulating industry. Photo by Naomi Yoder, Healthy Gulf. Flight courtesy of SouthWings Volunteer Pilot Scott Humphries.

For years, communities on the frontlines of climate change and petrochemical pollution have been fighting the false solution of liquid natural gas as a climate-friendlier alternative to other fossil fuels. The Environmental Integrity Project warned in its 2020 report titled Greenhouse Gases from Oil, Gas, and Petrochemical Production: <u>U.S. Fracking Boom Fuels Rise in Greenhouse Gasses and Health-Damaging Pollutants</u> that:

Liquefied natural gas export terminals have the greatest potential for growth in coming years, with 19 new projects in planning or construction that have the potential to increase greenhouse gas emissions by 79.8 million tons by the time they are fully operating...

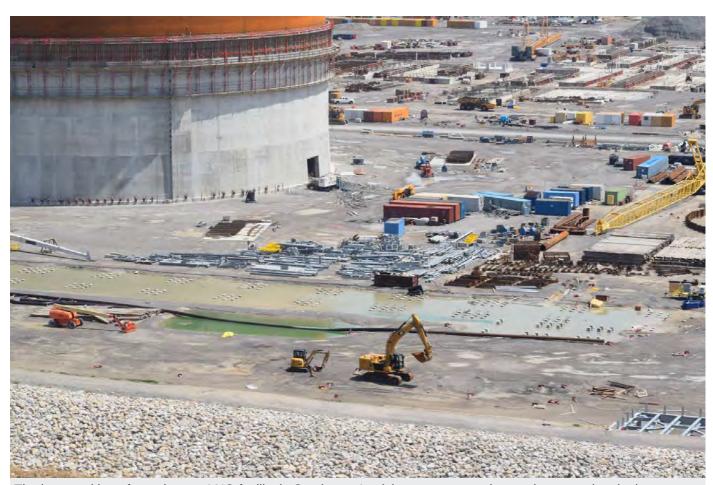
...The liquefied natural gas buildout is overwhelmingly concentrated on the Gulf Coast, where processing, storage, and transport infrastructure is already somewhat developed and where politics are favorable. Fifteen of the 19 forthcoming liquefied natural gas projects are located in Gulf states.





Construction continues along the Gulf Coast at breakneck speeds, despite years of "historic" climate catastrophes including hurricanes, floods, and freezes. While people suffer due to lacking basic and reliable infrastructure, climate change, and pollution, states like Texas and Louisiana continue to welcome the buildout of LNG pipelines and export terminals. Russia's invasion of Ukraine has further complicated the issue as many fossil fuel companies hide behind a veneer of supporting democracy by supplying fuel to Russia's markets. In reality, this narrative supports a very short-term solution at the expense of transitioning to a low carbon future.

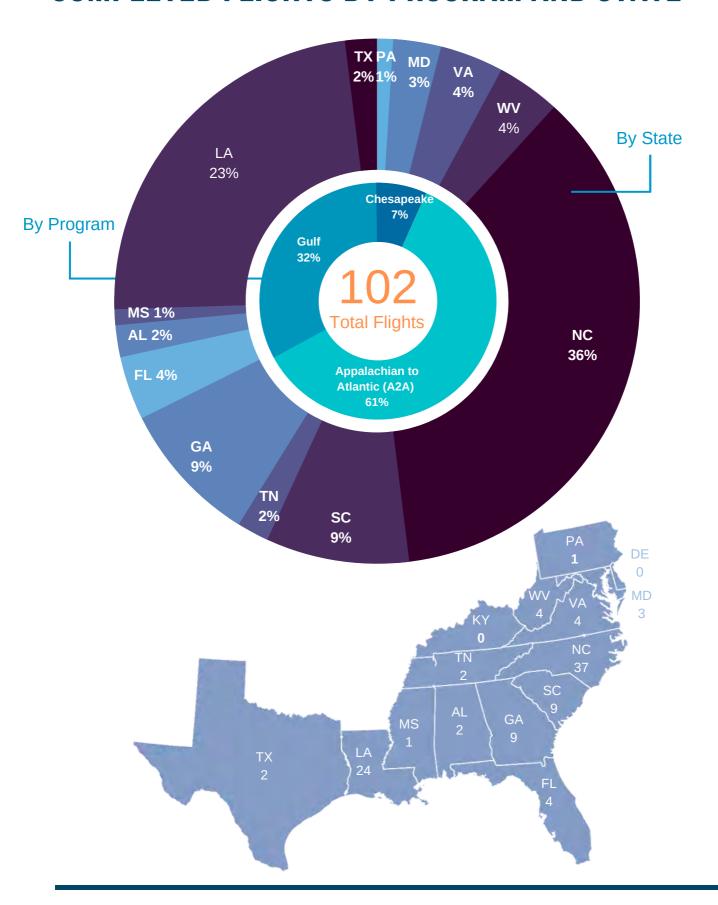
Groups like **Louisiana Bucket Brigade**, **Healthy Gulf**, and **Sierra Club** have joined the fight with community members to stop the buildout of LNG export terminals (and other infrastructure) in areas vulnerable to climate disasters, while shedding light on the fact that extracting, producing, transporting, and burning liquid natural gas contributes to the very same climate change that it supposedly will help mitigate.



The juxtaposition of a tank at an LNG facility in Southwest Louisiana to construction equipment, taken in the aftermath of Hurricane Laura, shows the massive scale of LNG production and distribution. LNG export terminals are being built in coastal areas, which are especially vulnerable to climate disasters. Photo by Naomi Yoder, Healthy Gulf. Flight courtesy of SouthWings Volunteer Pilot Leonard Guidry.



COMPLETED FLIGHTS BY PROGRAM AND STATE



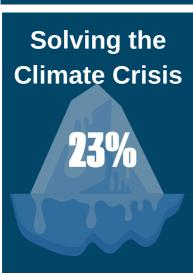


COMPLETED FLIGHTS BY ISSUE

In order to track the purpose of SouthWings flights, we assign "issues" to each flight. These issues help us identify programmatic themes in our flight work. On average, each flight is tagged with five issues.

Major issues of 2022 flight work include:









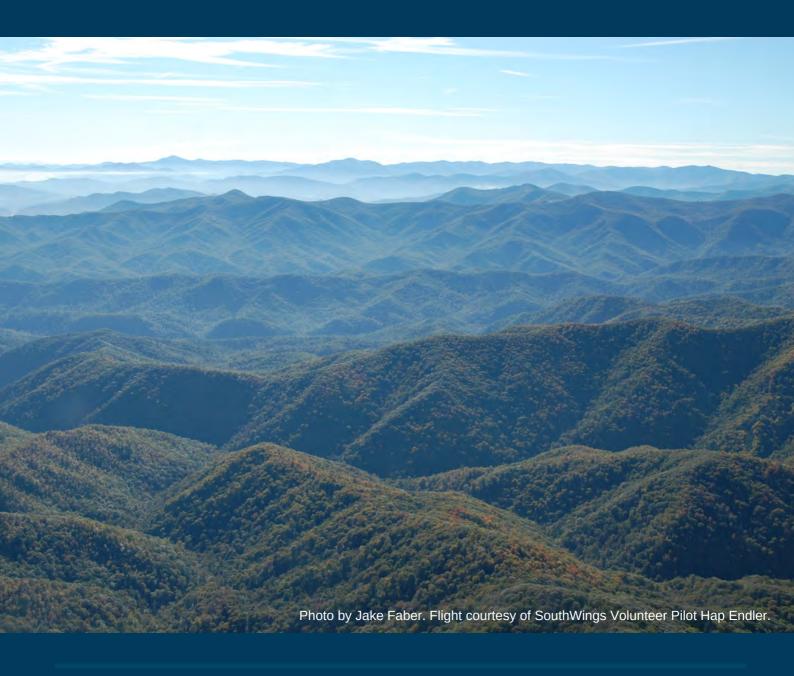








APPALACHIA TO ATLANTIC



JANUARY 2023 PAGE 8

GEORGIA

Nine flights have been arranged in Georgia so far this year, carrying a total of 13 passengers.

SouthWings continues to support the fight to protect the Okefenokee Swamp from a proposed titanium mine near Trail Ridge.



It was an amazing day! Mark was fantastic. Thank you SouthWings!

-Kim Bednarek, Okefenokee Swamp Park

In April, Volunteer Pilot Mark Andrews flew **Okefenokee**Swamp Park Executive Director, Kim Bednarek, and a potential partner from **Okefenokee Farm** over the vast Swamp. Okefenokee Swamp Park is working to encourage economic development that highlights the region's unique natural attractions. Following the flight, Okefenokee Farm has become a corporate sponsor of the St. Marys Riverkeeper and is working with One Hundred Miles and Okefenokee Swamp Park on agriand ecotourism opportunities for the region.

SouthWings and Volunteer Pilot Tim Moran were acknowledged in the recent release of PBS EcoSense for Living episode Okefenokee Destiny, from a flight in fall 2021.

A huge step forward in protecting the Okefenokee came this summer, when the <u>U.S. Army Corps of Engineers</u> reversed a previous decision, now requiring the mining company to apply for federal permits for the proposed project.



Wetlands and water trails in Okefenokee Swamp. Photo by Kim Bednarek. Flight courtesy of SouthWings Volunteer Pilot Mark Andrews.



On the coast of Georgia, **One Hundred Miles** is working to prevent the development of a massive gas station with 120 gas pumps and an impervious footprint the size of three football fields in an area surrounded by conservation lands and historic sites. A reporter from **The Brunswick News** accompanied Coastal Advocate, Susan Inman, on a flight to demonstrate the landscape impacts of the proposed project.



"To be able to see how much land is in conservation within this area can only be seen from the air. From the canals, hand-dug by enslaved people from the plantation era, to the wildlife conservation areas is truly something!" -Susan Inman, One Hundred Miles. An undeveloped interchange on I-95 in Brunswick is the target for this development. Flight courtesy of SouthWings.

Brunswick, GA is also fraught with several Superfund sites that threaten the local environment. The **Glynn Environmental Coalition** and **filmmaker Sam Ghioto** surveyed Brunswick's industrial facilities and Superfund sites for an <u>in-progress documentary film</u>.

Volunteer Pilot Landon Thorne supported ongoing content and data collection for **Emory University's** <u>Georgia Coast Atlas</u> with flights this spring and this fall. The atlas is a means to combine various forms of digital media with scholarly content to produce a website that they anticipate will be of great value to educators, conservationists, students, and the general public.

It was amazing to see how everything is connected. I saw how big these superfund sites are... the aerial perspective really allows one to see that these aren't some small, abstract parcels of land. Rather, these highly polluted areas are very large and connected to some sources of water that make their expanse even bigger.

-Sam Ghioto, filmmaker



Volunteer Pilot Richard Embry flew with **Savannah Riverkeeper** this year to gather photographic evidence of questionable waste application on agriculture fields near Augusta. The Savannah Riverkeeper also flew this fall with Volunteer Pilot David Asman to focus on land application sites at farms in Oglethorpe, Glascock, Greene and Wilkes Counties. Various kinds of waste have been dubbed "soil amendments" and can be applied to agricultural land in Georgia. Depending on the waste, this can cause water quality and public health issues. The Georgia Water Coalition has named this issue as one of its legislative priorities for 2023.

This year, SouthWings supported Altamaha Riverkeeper with two flights. The Altamaha Riverkeeper has been fighting the noxious discharge from the Rayonier Advanced Material facility in Jesup, GA for many years. This year, the facility's National Pollutant Discharge Elimination System (NPDES) permit came up for renewal. Altamaha Riverkeeper Fletcher Sams flew with Volunteer Pilot Wendell Todd this summer, and again in the fall with Volunteer Pilot John Steward, to gather photographic evidence to use in opposition to the permit renewal, .



Sandbars along the mighy Altamaha River. Photo and flight courtesy of SouthWings Volunteer Pilot John Steward.



Rayonier Advanced Materials facility adjacent to the Altamaha River. Photo and flight courtesy of SouthWings Volunteer Pilot John Steward.



Altamaha Riverkeeper, Fletcher Sams and Volunteer Pilot John Steward. Photo and flight courtesy of SouthWings Volunteer Pilot John Steward.

SOUTH CAROLINA

Nine flights have been arranged so far in South Carolina this year, carrying a total of 10 passengers.



Having aerial shots is invaluable to illustrate all of these issues we are working on.

-Melanie Ruhlman, Save Our Saluda

77

This spring, Volunteer Pilot Woody Beck worked with Save Our Saluda to fly Melanie Ruhlman over the Saluda watershed. She aims to fly the same route each year from downtown Greenville, following the Reedy River to Lake Greenwood and then following the Saluda River back up towards the headwaters in the mountains. This helps the organization document the rapid development in the greater Greenville area and monitor other issues in the watershed. Save Our Saluda is working with local partners to promote good land use policies in rural Greenville County. Over 200,000 new residents are expected for the county by 2040. Despite overwhelming support from citizens and environmental leaders for smart, guided growth, there is a lack of political will to enact local ordinances to reign in the fiscally irresponsible sprawl growth that is straining services and negatively affecting natural resources and quality of life in local communities.

On the flight, they found a particularly egregious sediment pollution problem from a site cleared for cattle in southern Greenville County. Save Our Saluda partnered with South Carolina Environmental Law Project (SCELP) to submit a Freedom of Information Act request, through which they learned of corrective actions previously issued by the Department of Health and Environmental Control. Unfortunately, corrections were insufficient and impacts to surface waters are ongoing as massive loads of in-stream sediment are transported downstream during stormflow.



Photo by Melanie Ruhlman. Flight courtesy of SouthWings Volunteer Pilot Woody Beck.



Photographer J Henry Fair is embarking on a project to illustrate the little-known story of Harriet Tubman's rescue mission to free numerous enslaved people from rice plantations along the Combahee River. Tubman coordinated two steam-powered paddle boats to navigate the winding tidal river in the middle of the night. Fair's images and videos will be used in a book anticipated for September 2023 and an accompanying museum exhibit to open in August 2023.



The Combahee Raid took place on the full moon in June. It was an essential aspect of the mission, providing the cover of darkness and the aid of the tides to navigate the shallow, twisting coastal river. Photo by J Henry Fair. Flight courtesy of SouthWings Volunteer Pilot Hap Endler.



Combahee River wetlands. Wiggins, South Carolina. Photo by J Henry Fair. Flight courtesy of SouthWings Volunteer Pilot Hap Endler.

We hope to make people aware of the heroic deeds involved in bringing an end to the industry of slavery, and the priceless value of the ACE Basin ecosystem which was shaped by human hands, and has evolved into one of the last extensive wild coastal habitats in the USA.

-J Henry Fair



On the coast of South Carolina, Volunteer Pilot Jon Engle captured photos of the restored Crab Bank, an island in the Charleston Harbor. **South Carolina Audubon Society** worked with the Army Corps of Engineers to restore this important shorebird nesting habitat. In January, the project was featured on the Audubon website.

In April, **photographer Mac Stone** and Volunteer Pilot Georgina Rhinehart flew the Congaree River and National Park at dawn to capture images of the winding river and mature floodplain for ongoing work on a story for National Geographic about old growth swamps.



"The Army Corps has completed construction of the island and nesting is well underway this year! The project has been a huge success so far with lots of nesting seabirds and shorebirds on the island." -Nolan Schillerstrom, Audubon South Carolina. Photo by Jon Engle. Flight courtesy of SouthWings Volunteer Pilot Jon Engle.

An aerial photograph is really the only way to capture the majesty of this waterway and seeing it as the sun rose over the horizon was the best way to showcase the importance of this wilderness to an audience that might not have ever heard of this region.

-Mac Stone

Often, outcomes from SouthWings flights materialize months or even years after the flight. This summer, the final report for the master planning process for the new Black River Water Trail & Park Network was released. Georeferenced aerial photos from two flights in 2021 aided the comprehensive analyses conducted by **Earth Design**.



Screenshot of Volunteer Pilot Jon Engle's photos in the Black River Water Trail & Park Network Master Plan (p.22), released June 2022. Photo by Jon Engle. Flight courtesy of SouthWings Volunteer Pilot Jon Engle.



Also this summer, litigation over the ownership of Waties Island was settled, allowing the **Open Space Institute (OSI)** to move forward with permanent protection of the island. **South Carolina Environmental Law Project (SCELP)** represented Olivia Boyce-Abel in the dispute over ownership of about 100 acres of accreted land on the island. The lawsuit was preventing OSI from acquiring the property. OSI plans to hold the property until it can be transferred to South Carolina Department of Natural Resources for a heritage trust preserve. Photos taken for SCELP in 2021 by Volunteer Pilot Chris Carmel were used to announce the victory on Facebook and in a My Horry News article.



Waties Island, looking south. Photo by SouthWings Volunteer Pilot Chris Carmel.



North Myrtle Beach and Waties Island, looking north. Photo by SouthWings Volunteer Pilot Chris Carmel.

You can count on just a few fingers the number of opportunities in South Carolina to protect 260 acres and almost a mile of ocean front... so this is an incredibly rare opportunity to protect a real gem of a property.

-Nate Berry, Senior Vice President OSI, quoted in My Horry News



In November, Volunteer Pilot Richard Embry flew with **Catawba Riverkeeper** staff to identify and investigate negligent logging operations in the Southern Catawba River Basin. They plan to follow up with water quality testing near these logging sites.



I had the pleasure of flying an amazing mission over the Appalachian foothills of South Carolina. Upstate Forever wanted to educate a state conservation director and several other VIPs about development encroaching on a scenic highway and also showcase some of their conservation efforts...We followed a Rail-to-Trail project up into the mountains and had great fun flying around local landmarks like Table Rock. I had lunch with the group afterwards and learned about each person's life-long efforts to make the world a better place. It was truly inspiring and it's why I fly for SouthWings.

-Bob Thomason, SouthWings Volunteer Pilot



This fall, Upstate Forever flew with influential individuals to discuss conservation needs in the upstate of South Carolina. The flight focused on parcels of land that will protect water quality, wildlife habitat, recreation areas, and scenic valley. They also explored the Saluda Grade Rail to Trail project.



L-R: Andrea Cooper (Upstate Forever), Carlton Owen (Chairman, Greenville County Historic and Natural Resources Trust), Tom Mullikin (Chair, SC Floodwater Commission and environmental attorney), Bob Thomason (SouthWings Volunteer Pilot), Raleigh West (SC Conservation Bank). Photo by Laura Early, SouthWings.



NORTH CAROLINA

40 flights have been completed in North Carolina this year, carrying a total of 65 passengers.

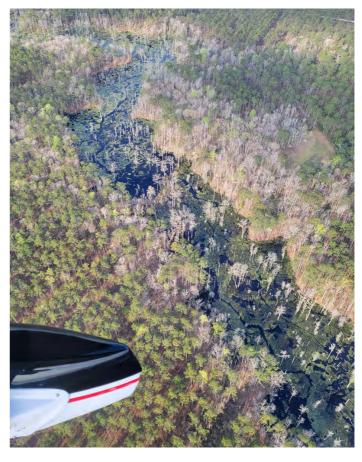
This spring, Volunteer Pilot Art Falk conducted a series of flights to support a team of wildlife biologists at **N.C. Wildlife Resources Commission**. The biologists were surveying Great Blue Heron and Great Egret nesting colonies along inland rivers in the coastal plain. The data gathered from these flights will supplement on-the-ground surveys and will help inform conservation efforts and management decisions. (Photos provided by N.C. Wildlife Resources Commission, flight courtesy of SouthWings Volunteer Pilot Art Falk.)





It was my first time in a small aircraft and it was very fun and a much different experience... It was nice to get a "bird's eye view" while looking for nests and it gives you an idea of what the birds see when flying into their nesting site. I learned a lot about the habitat selection of the herons and egrets that I was unaware of prior to the survey.

-John Lynch, NCWRC





In western North Carolina, SouthWings has continued to support the work of the **National Parks Conservation Association** (NPCA) and the **Safe Passage Coalition** in their work to study and recommend solutions regarding wildlife movement along the I-40 corridor through the Pigeon River Gorge. A <u>report of the research findings and recommendations</u> was recently released by NPCA and **Wildlands Network**. The study identifies priority areas along I-40 where mitigation strategies such as road crossing structures could be best implemented to reduce wildlife-vehicle collisions and increase wildlife habitat connectivity.

In July, Volunteer Pilot John Leder flew **Wildlands Network**'s research scientist Liz Hillard and filmmaker Garrett Martin to capture footage for a <u>short film</u> about the ongoing project.

This fall, <u>SouthWings was recognized</u> as one of several partners that are critical to the coalition's work to make I-40 safer for motorists and wildlife: "This includes flying journalists, researchers, and videographers, resulting in clear and compelling stories that have helped to advance our work."



My vision for the future would be that we have structures, a linkage system in the gorge for wildlife to move safely, and that information that we've learned in the gorge allows us to then implement those throughout the Southern Appalachians... a truly connected East so that these conservation efforts and wildlife can thrive.

-Liz Hillard, Wildlands Network



In May, Volunteer Pilot Hap Endler conducted a scoping flight for the team's next study area - the stretch of I-26 from Mars Hill, NC to Erwin, TN. This study aims to assess wildlife road mortality and wildlife activity near the interstate to improve wildlife connectivity and public safety. The flight allowed the researchers to gain a landscape perspective of the new study area and understand natural and manmade features that influence wildlife movement patterns.

Several photos from the flight were used in **NPCA**'s research permit application to the Tennessee Department of Transportation, detailing the plans for the study. Photos were also used in a presentation during the Safe Passage Coalition Quarterly Meeting in November.



SouthWings Volunteer Pilot Hap Endler, Jeff Hunter (NPCA), Aurora Wynn (NPCA), and photographer Taylor Barnhill prepare to scope I-26 study area.



The study will assess wildlife use of existing structures such as this span bridge in TN. Photo by Taylor Barnhill, flight courtesy of SouthWings Volunteer Pilot Hap Endler.



The study will also look at wildlife activity within the I-26 right-of-way, such as this scenic overlook in TN. Photo by Taylor Barnhill, flight courtesy of SouthWings Volunteer Pilot Hap Endler.



SouthWings continues to support Waterkeepers across the state of North Carolina. This year, volunteer pilots have conducted a total of 20 flights with the Waccamaw Riverkeeper, Cape Fear Riverkeeper, Yadkin Riverkeeper, Broad Riverkeeper, Dan Riverkeeper, Haw Riverkeeper, White Oak Riverkeeper, Neuse Riverkeeper, Catawba Riverkeeper, and the Waterkeeper Alliance. Flights have assisted with holding polluters accountable and monitoring concentrated animal feeding operations (CAFOs), sedimentation, algal blooms, and coal ash ponds.

This spring, The NC Department of Environmental Quality fined Bottomley Evergreens & Farms and Bottomley Properties more than \$268,000 for water quality violations, one of the largest civil penalties ever assessed by the agency, an instance that the **Watauga Riverkeeper** investigated on a flight with Volunteer Pilot Holliday Obrecht in 2021.



New poultry litter barns, lessening noncompliance regarding poultry litter storage. Photo by David Caldwell, Broad Riverkeeper. Flight courtesy of SouthWings Volunteer Pilot Peter Stauble.



Black mat algae in Tuckertown Reservoir in the Yadkin River watershed. This cyanobacteria has the potential to produce harmful toxins. Flight courtesy of SouthWings Volunteer Pilot Holliday Obrecht.



Cape Fear River Watch submitted documentation of 4 cases of improper waste management on CAFOs. Two of those referrals resulted in 2 separate notices of violations for waste discharge into adjacent water bodies. Photo by CFRW. Flights courtesy of SouthWings Volunteer Pilots Doug Oakley and Bill Kahn.

One thing to note is that the poultry producers are doing a better job at handling their waste. I rarely see uncovered piles now. Which, I believe, is due in a large part to our efforts over several years reporting possible violations to DEQ, and then DEQ putting heat on the poultry growers.

-David Caldwell, Broad Riverkeeper



In addition to routine monitoring flights conducted, SouthWings, in collaboration with the Waterkeeper Alliance, hosted a fly-in event to expose other environmental and justice organizations to the CAFO problem first-hand. This experience is helping to forge new partnerships in advocating for clean farms, healthier communities, and clean water in North Carolina. For this inaugural event, two volunteer pilots flew ten passengers over Duplin County. Kemp Burdette (Cape Fear Riverkeeper) and Rick Dove (Waterkeeper Alliance) demonstrated the impacts of CAFOs while observing the landscape from the air with staff from Southern Environmental Law Center, North Carolina Conservation Network, Environmental Justice Community Action Network, Socially Responsible Agricultural Project, and Duke Environmental Law and Policy Clinic. These flights proved to be eyeopening even for those who have worked on the issue for years, and passengers shared their experiences in this video.

The flight was very moving, but I've been struggling to understand why that should be true. After all, I've worked on CAFO issues for many years, can spout off all the statistics about the damage to ecosystems and to people's health and to the very fabric of rural communities...And yet, there is something about hovering over the landscape, as a bird, and realizing that your entire field of view is filled with factory farms. Directly below us is a lagoon, the color of watermelon. Just above it, toward the horizon, is another lagoon, but this one has spots that Rick tells us are the peaks of sludge mountains cresting above the liquid's surface. As the eye continues to travel upward, there's nothing to see except the gleaming matchsticks of more pig and poultry barns, the red splotches of lagoons, and the matrix of swamp and waterways, some glowing an iridescent green, that weave through it all.

-Lee Miller, Duke Environmental Law and Policy Clinic



Back row: Rick Dove (WKA), Rankin Whittington (volunteer pilot), Doug Oakley (volunteer pilot), Larry Baldwin (WKA). Front row: Kemp Burdette (CFRW), Jeff Currie (Lumber Riverkeeper)

Being able to go up and see so many CAFOs, in every direction, and so close to one another, brought up so many overwhelming feelings for me at once. I believe such feelings can only bubble up when you see what you already know to be true with your own two eyes.

-A'Jae Grisby, NC Conservation Network



SouthWings supported three flights to help gain media exposure for environmental issues associated with CAFOs in North Carolina. Volunteer Pilot Doug Oakley flew **Cape Fear RiverWatch** staff with a reporter from **The News & Observer** and a writer and photographer from **The Bitter Southerner** on two separate occasions. Volunteer Pilot Rolf Wallin also flew a reporter and photographer from the **Charlotte Observer** over poultry farms in Anson County. These articles are yet to be published.

Coastal Carolina Riverwatch's (CCRW) new White Oak Riverkeeper, Riley Lewis took two SouthWings flights this year. Ahead of Hurricane Ian, Volunteer Pilot Paul Werbin provided an aerial look at a harmful algal bloom (HAB) in the Stones Bay area of the New River. On the flight, they were able to document the bloom had moved out from the creeks into the center area of Stones Bay. After the flight, a reporter from the local news station WCTN 9 interviewed CCRW staff and the SouthWings volunteer pilot.

We were able to support the **Waterkeeper Alliance**'s Rick Dove on two flights this year as well. Rick Dove flew with Volunteer Pilot Brian Creed to observe over 300 hog and poultry facilities. He found eight that had potential violations. Waterkeeper Alliance plans to use those photos for enforcement actions or litigation purposes. Rick Dove was also able to accompany White Oak Riverkeeper, Riley Lewis on a flight to monitor CAFOs in her watershed. This was a great learning experience in finding farms and identifying potential violations for the new Waterkeeper.

The main goal of this flight was to observe a Harmful Algae Bloom that had been moving around a river for more than 3 weeks. I was not able to clearly see the size and scope of the bloom from the water, but the aerial view allowed me to see just how expansive the algae was in the area. Because of this key insight, Coastal Carolina Riverwatch was able to update the public about the severity of the Algae Bloom and inform them of possible impacts to water quality.

-Riley Lewis, CCRW



Riley Lewis and Rick Dove. Photo by Riley Lewis. Flight courtesy of SouthWings Volunteer Pilot Rolf Wallin.



Rust tide algal bloom in Stones Bay. Photo by Riley Lewis. Flight courtesy of SouthWings Volunteer Pilot Paul Werbin.



Photographer Mac Stone's work was featured in this year's May issue of **National Geographic Magazine**. Mac flew with Volunteer Pilot Robert Searfoss on a series of flights in 2021 over the coastal Cape Fear River. The photograph is part of the story <u>Forests are reeling from climate change -- but the future isn't lost.</u>



WEST VIRGINIA

Four flights have been arranged in West Virginia this year, carrying a total of seven passengers.

Author and freelance writer **Bob Wyss** was able to join Vernon Haltom, Executive Director of **Coal River Mountain Watch** (CRMW), on a flight over mountaintop removal (MTR) sites in West Virginia with Volunteer Pilot Scott Simonton. Wyss is working on a book about the history of coal in America to be published by University of Connecticut Press.



"One chapter of my book... will be devoted to mountaintop removal, and the whole reason I came to WV was to see it for myself and then report on it. You have provided an invaluable resource." - Bob Wyss. Alpha Metallurgical Resources operates a 12 square mile mountaintop removal complex on Coal River Mountain. Photo by Vernon Haltom, CRMW. Flight courtesy of SouthWings Volunteer Pilot Scott Simonton.

Vernon Haltom was able to learn the extent of new MTR activity in areas that are otherwise inaccessible to the public and advocacy groups. CRMW used photos and videos from the flight to raise awareness in the local community that MTR is still happening near them. CRMW also submitted two reports on possible permit violations.

SouthWings flights reinforce our work to let the public know the ongoing nature of MTR, its hazards and proximity to communities, and its vast scale. -Vernon Haltom, CRMW



CRMW submitted this photo to WVDEP for a potential violation for erosion and failure to stabilize the valley fill at the active Twilight II mountaintop removal permit operated by Lexington Coal Company. Photo by Vernon Haltom. Flight courtesy of SouthWings Volunteer Pilot Scott Simonton.



Volunteer Pilot Rankin Whittington also supported Coal River Mountain Watch with a flight in September. This flight was in collaboration with Bloomberg and NPR who are creating a multimedia package focused on mountaintop removal mining in West Virginia. The first Bloomberg article in the series was published in October: The Coal is Gone, But the Mess Remains.

CRMW also documented several potential violations which they submitted to the West Virginia Department of Environmental Quality, in addition to a request to not renew Lexington Coal Co.'s Crescent #2 permit. DEQ has since suspended Lexington Coal Co.'s permits for Crescent #2 and Twilight III-A, citing over 50 violations between these two permits alone.



"The Twilight mining complex in WV was once owned by Alpha Metallurgical Resources. Regulators have faulted current owner Lexington Coal for failing to reclaim areas where production has ceased." Photo by Kristian Thacker on Bloomberg.com. Flight courtesy SouthWings Volunteer Pilot Rankin Whittington.

In November, FracTracker's Ted Auch flew with Volunteer Pilot Donald Sutherland to document the partially constructed Mountain Valley Pipeline from Mobley, WV to Bleckley, WV. He saw numerous instances where the soil and revegetation efforts had failed causing multiple subsidence/failure events speaking to the concerns that many opponents had about the permitting of a high pressure gas transmission pipeline. This is an ongoing collaboration with Protect Our Water, Heritage, and Rights (POWHR).



Photo by Ted Auch, FracTracker. Flight courtesy of SouthWings Volunteer Pilot Donald Sutherland.



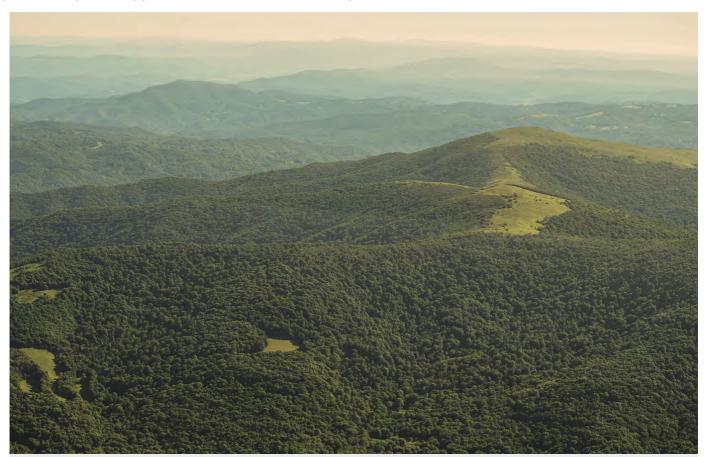
TENNESSEE & KENTUCKY

Two SouthWings flight with four passengers has been completed in Tennessee this year. No flights have been completed this year in Kentucky.

Volunteer Pilot Frank Bell worked with a photographer to capture images of the Cherokee National Forest along the Tennessee/North Carolina border. These images will be used by **Southern Environmental Law Center** and **Cherokee Forest Voices** to assess landscape conditions and support an updated inventory of eligible wilderness areas in preparation for the upcoming Forest Plan Revision.

Volunteer Pilot Micheal Spurgeon flew partners from **Appalachian Voices** and **Clearfork Water Monitoring Project** with **Southern Dialogue** filmmaker, Rob Winslow to gather footage for an upcoming climate change transition documentary focused on communities in eastern Tennessee.

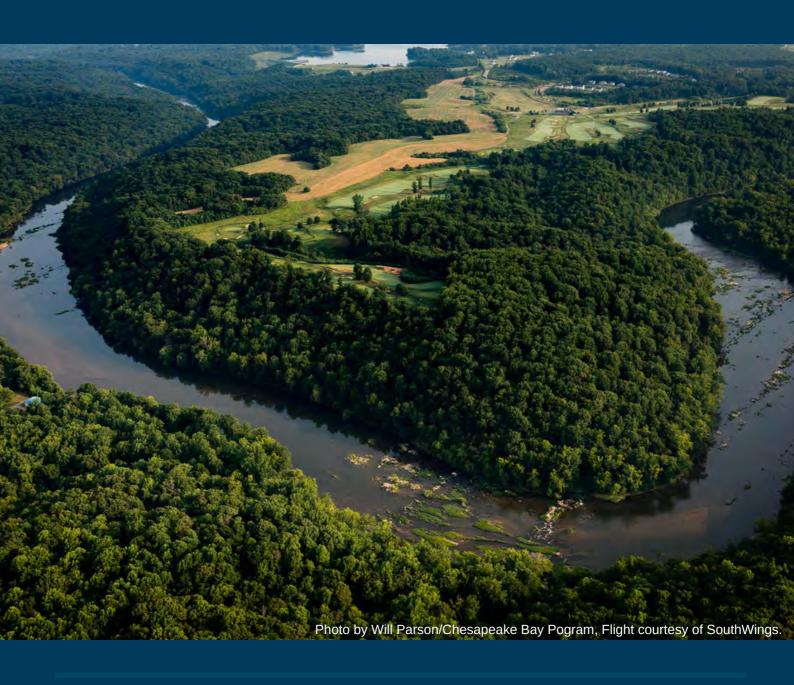
SouthWings continues to participate in the Alliance for Appalachia and is eager to build new partnerships to support conservation in Kentucky and Tennessee.



Roan Mountain is one of the identified and prioritized "Tennessee Mountain Treasures," which is being depicted and described in the forthcoming report on eligible wilderness areas within Cherokee National Forest. Photo by Jack Henderson. Flight courtesy of SouthWings Volunteer Pilot Frank Bell.



CHESAPEAKE BAY



JANUARY 2023 PAGE 27

VIRGINIA

Four flights have been completed in Virginia carrying a total of nine passengers.

In Virginia's southern coastal plain, representatives from **Southern Forests Conservation Coalition** and **Dogwood Alliance** flew with Volunteer Pilot Brian Creed to investigate logging surrounding Enviva's Southampton wood pellet production facility. Clearcut logging and destruction of wetlands can impact water quality, flooding, carbon sequestration, and wildlife habitat.



Clearcut near Hargraves Millpond, Sussex, VA within Enviva sourcing radius. Photo by Dogwood Alliance. Flight courtesy of SouthWings.

SouthWings also worked with the **James River Association** to plan two field trip flights for the **Choose Clean Water Coalition Conference** in Richmond, VA that unfortunately had to be cancelled due to weather.

In March, Volunteer Pilot Jeremy Jacobsohn worked with a new SouthWings partner, **The Cacapon and Lost Rivers Land Trust** to complete annual monitoring of several conservation easements over 1,000 acres each. At 125 miles long, the Cacapon River is the third largest tributary to the Potomoc River. The Cacapon watershed sits on the border of WV and VA.



Volunteer Pilot Rankin Whittington supported new SouthWings partner **The Clinch Coalition** with a flight in early Spring to document the effects of logging operations and environmental damage on motorized vehicle trails. Following the flight, one of the state-run ATV trails they documented and reported to regulators as a possible regulatory violation has been closed and barricaded. The Clinch Coalition protects the forests and watersheds in southwestern VA, and will also use photos from the flight in a video to share on social media to demonstrate the extent of logging in the National Forest.



"...We have a strong hunch this happened at least in part because of our ability to fly over the site and document it extensively."

-Wally Smith, The Clinch Coalition

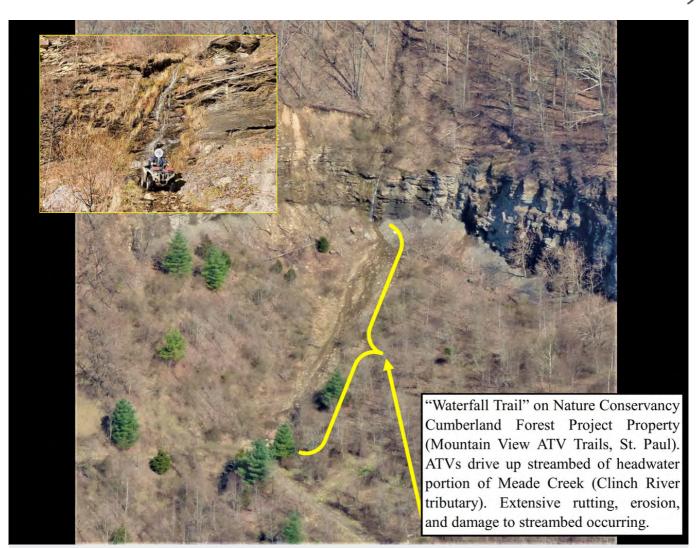


Photo by Wally Smith, The Clinch Coalition. Flight courtesy of SouthWings Volunteer Pilot Rankin Whittington.



This year, SouthWings worked with **Piedmont Environmental Council** and Asheville filmmaker, Garrett Martin to produce a <u>short video</u> to demonstrate how partners in the Chesapeake Bay region can utilize a SouthWings flight. Piedmont Environmental Council has done several flights with SouthWings over the years, and they use aerial photographs in a variety of ways to communicate to the public: online, social media, email alerts, print publications and more.



Video: "SouthWings Supports Chesapeake Bay Partners." Flight courtesy of SouthWings Volunteer Pilot Jeremy Jacobsohn.

We do a ton of aerial photography using drones and that's very very useful to us, but there is a limit to what you can see from a drone. For certain issues, you just need to be higher, and that's where SouthWings has been incredibly useful for us.
...The ability to get up in the air with a nice camera 2 - 3,000 feet above and shoot an entire landscape is essential to our communication.

-Hugh Kenny, Piedmont Environmental Council



Still from video by Garrett Martin. Flight courtesy of SouthWings Volunteer Pilot Jeremy Jacobsohn.



MARYLAND

Three flights have been completed in Maryland, carrying five passengers.

Volunteer Pilot John Sapienza flew with the **Chesapeake Legal Alliance** to capture photos related to some of their current cases. These photos will be useful for raising public awareness about these cases, and may be used in court to support the litigation efforts.



It was so interesting and beneficial seeing these sites from the air and a great experience talking to pilot John. I was able to get a better sense of the scope of destruction at one site and a firsthand look at a facility that is the subject of some long-term litigation.

-Will Halnon, Chesapeake Legal Alliance



Clearing in Abingdon Woods. Photo by Will Halnon/Chesapeake Legal Alliance. Flight courtesy of SouthWings Volunteer Pilot John Sapienza.



This fall, SouthWings has been working with the Choose Clean Water Coalition to organize flights for members of the Communicators Workgroup. These flights will help catalyze new partnerships with members of the Coalition. Volunteer Pilot Jeremy Jacobsohn took two flights this fall, carrying passengers from **Potomac Conservancy** and **Catoctin Land Trust**. They were able to gather photos to use in their communications and gain a new perspective on the landscapes they work to protect.



Potomac River. Photo by Melissa Diemand. Flight courtesy of SouthWings Volunteer Pilot Jeremy Jacobsohn.

Several of my colleagues are considering how this opportunity can help with their clean water projects, including our Director of Land Conservation who works on easements and conservation corridors in the Shenandoah Valley.

-Melissa Diemand, Potomac Conservancy



Daniella Jungova, Director of Communications for Potomac Conservancy gathering learning about the Potomac watershed from the air. Flight courtesy of SouthWings Volunteer Pilot Jeremy Jacobsohn.



PENNSYLVANIA & DELAWARE

SouthWings completed one flight in Pennsylvania this year, and no flights have been completed this year in Delaware.

Will Parson with the **Chesapeake Bay Program** (CBP) flew with Volunteer Pilot Bob Panebianco near Williamsport, PA which is the focus of CBP's Targeted Outreach for Green Infrastructure in Vulnerable Communities project. The flight also covered the newest Pennsylvania State Park - Susquehanna Riverlands - established in September 2022. The photos will become part of the CBP's photo archive where they are freely available to support a variety of non-commercial communications by CBP partners and other organizations.

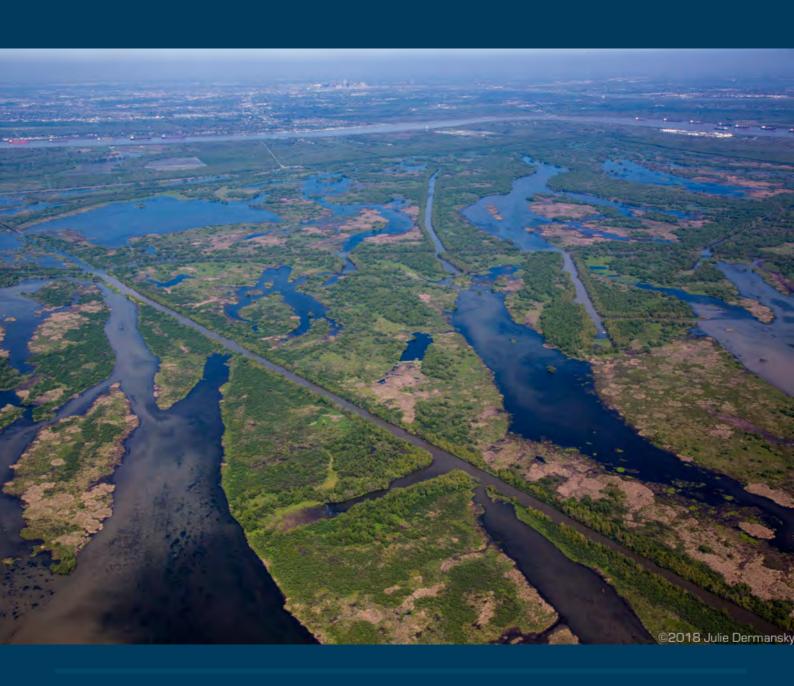
SouthWings' Eastern Program Manager also attended the Choose Clean Water Conference in May and was able to connect with several existing flight partners and learn about projects that may benefit from a SouthWings flight in the future. During the conference, Will Parson, Media Specialist for the **Chesapeake Bay Program** presented a session on visual storytelling that featured aerial photographs from previous SouthWings flights. Some of the tips he offered were that an unusual perspective makes a photo more interesting and that the longer you look at a photograph, the longer you are likely to engage with the associated text.



Susquehanna Riverlands State Park in York County, PA. Photo by Will Parson/Chesapeake Bay Program. Flight courtesy of SouthWings.



GULF OF MEXICO

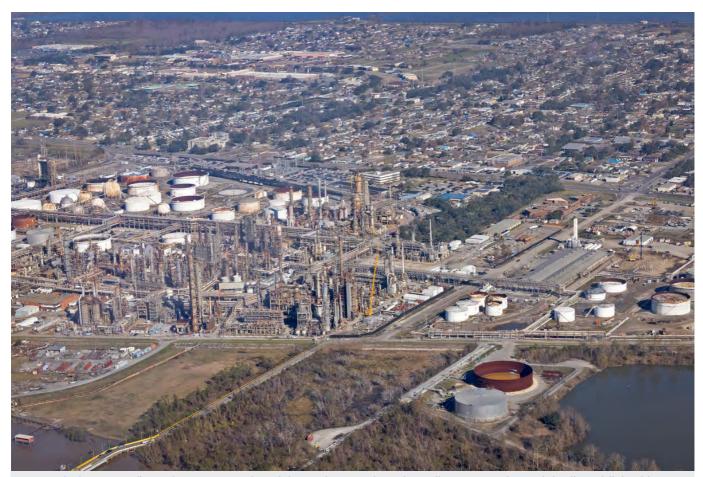


JANUARY 2023 PAGE 34

LOUISIANA

SouthWings volunteer pilots completed 24 flights carrying 49 passengers in Louisiana as in 2022.

The first flights of the year centered around investigating and reporting instances of pollution, as well as visibility on the damage that petro-chemical industries have inflicted upon the disappearing coastline. Julie Dermansky with **DeSmog Blog**, in cooperation with **Healthy Gulf**, documented a major diesel pipeline spill outside of Chalmette, LA on a flight with Volunteer Pilot Jared Savage. Her subsequent <u>article</u> called attention to the casual attitude of regulators toward environmental protection and climate change in Louisiana, as well as lack of transparency with the public.



PBF's Chalmette Refinery in St. Bernard Parish, Louisana. Photo by Julie Dermansky. Originally published in DeSmog. Flight courtesy of SouthWings Volunteer Pilot Jared Savage.

In April, SouthWings helped expose <u>controversial flood-prevention projects</u> in Acadiana, Louisiana as the area continues to have "historic" floods due to climate change. **The Current** credits its flight with SouthWings Volunteer Pilot Leonard Guidry for assisting the development of <u>another story</u> about wetlands impacts and alleged mishandling of government funds. An image from the flight was also prominently featured in an article about <u>Lafayette Consolidated</u> <u>Government's handling of a project to dig up spoil bank levees</u> along the Vermillion River.



In order to tell the story, the audience must understand and see the landscape.

-Jazmin Miller, Jonesland documentary



A large portion of flights in Louisiana also centered around logistical and public support of coastal restoration projects. In April, Volunteer Pilot Christopher Noth flew a scientist from **Louisiana State University** and a GIS expert to scope potential sites for a tribal-led restoration project. They documented extensive damage done by years of unchecked industry along the coastline, and provided useful information to the tribal-led project.



Lafayette Consolidated Government removed spoil banks from St. Martin Parish. The dirt was then placed on the Lafayette side of the Vermillion River channel as part of a controversial flood control project. Photo by Travis Gauthier of The Current. Flight courtesy of SouthWings Volunteer Pilot Leonard Guidry



Travis Gauthier of The Current photographs the Homewood Detention Pond project north of Milton, LA. On May 4, a judge determined that LCG improperly seized the land and ordered it to cease work on the site. Flight courtesy of SouthWings Volunteer Pilot Leonard Guidry.



SouthWings also worked with Coalition to Restore Coastal Louisiana and Restore the Mississippi River Delta Coalition to arrange flights for a variety of influential stakeholders as well as staff. Volunteer Pilots Les Abend, Christopher Noth, Jared Savage, Emmet Bartholomew, Lance Stuke, and Brian Robbins flew partners including Chef Dana Honn of Chef's Brigade, Urban Conservancy, City of New Orleans' Infrastructure Program Manager, Rural LISC, and the Walton Family Foundation. Les Abend shared his experiences flying for SouthWings with Flying Magazine!



Dana Eness and Sascha Bollag of the Urban Conservancy share their <u>flight testimonial</u>. Video and photo credit: Virginia Richard.



SouthWings Volunteer Pilot Christopher Noth and flying partner/wife Justine Noth smile with Daniel Jatres, Infrastructure Program Manager for the City of New Orleans and Corey Miller of Coalition to Restore Coastal Louisiana. Mr. Jatres and the Noths learned about coastal challenges and potential solutions first-hand. Photo by Justine and Christopher Noth.

I've driven [the flight route] many times and I've been out on the water, but being above really gives you a sense of the vulnerability and the urgency of the work that is being done to build land and stabilize that whole region...

-Dana Eness, Executive Director of Urban Conservancy





A liquid natural gas export terminal in Southwest Louisiana. Photo by Mike Lee. Originally published in E&E News. Flight courtesy of SouthWings Volunteer Pilot Scott Humphries.

[The flight] has certainly strengthened my work by helping me better understand the scale and footprint of what we are fighting.

-Jessi Parfait, Campaign Representative for Sierra Club's Beyond Dirty Fuels Campaign

In November, Volunteer Pilot Brian Robbins assisted with several flights in Southeast Louisiana, including one over proposed and current industrial sites in Plaquemines Parish, like the LNG export terminal. This industry is exacerbating wetland loss in an area already disproportionately burdened by climate change impacts and in need of maintaining every acre of wetlands. Healthy Gulf, Sierra Club, and a local journalist flew to investigate, document, and expose ongoing harms.

Throughout May and June, SouthWings completed five media-focused flights on liquid natural gas export infrastructure in an area hammered by Hurricanes Laura and Delta, a freeze, and a flood. Journalists from **E&E News**, **Floodlight** News, and other outlets saw first-hand, along with Volunteer Pilots Leonard Guidry and Scott Humphries, the enormity of LNG infrastructure, and their experiences and photos informed national reporting. Additionally, a report from Louisiana Bucket Brigade titled "Gas Export Spotlight: Venture Global Calcasieu Pass Facility Accidents" features a photo from one of these flights. Going forward, photos and videos will continue to be used by the media and frontline organizations to educate and mobilize the public around LNG export issues and the communities directly impacted.



Jessi Parfait of Sierra Club photographs the construction of a new LNG terminal in Plaquemines Parish. Flight courtesy of SouthWings Volunteer Pilot Brian Robbins.



Over the years, SouthWings has supported **Dr. Alex Kolker** of **Louisiana Universities Marine Consortium (LUMCON)**'s research on emerging crevasses in the Mississippi River. These crevasses have significant implications for coastal restoration, and one of them, **Neptune Pass**, is getting <u>local</u> and <u>national media attention</u>.

Thanks to all of SouthWings' volunteer pilots who have helped Dr. Kolker with his research over the years: Lance Rydberg, Emmet Bartholomew, Ken Knevel, Leonard Guidry, and Mike Guidry.

I just wanted to say a big thanks to SouthWings. Last year, you helped us get in the air to look at a developing crevasse in the lower Mississippi River. Today, we released our first technical report on this crevasse, which is now one of the larger pathways in the lower Mississippi River.

-Dr. Alex Kolker, LUMCON



Image used in the <u>Grist</u> headline about Neptune Pass. Photo by Dr. Alex Kolker, LUMCON. Flight courtesy of SouthWings.



77



A crawfish trap which once sat submerged in water is now mostly buried under sediment. Sediment is helpful for building land; however sedimentation of a cypress/tupelo swamp reduces its flood protection capabilities, reduces biodiversity, and damages the ecosystem. Flying with SouthWings allowed Atchafalaya Basinkeeper (ABK) to spot new and increasing areas of sedimentation while the water in the Basin is low, empowering them to document large patterns. Photo by Healthy Gulf and Atchafalaya Basinkeeper.

The timing of this flight was very important because the low water allowed us to see how the sediment is building up in certain areas due to these river water diversions. We were able to get all of the images we needed.

-Misha Mitchell, Legal Counsel for Atchafalaya Basinkeeper

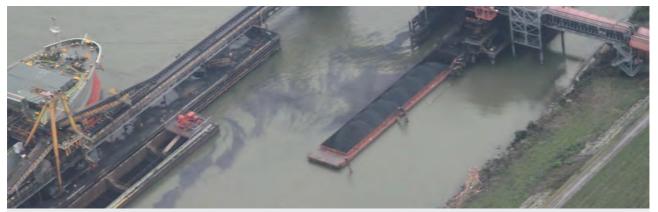
The Atchafalaya Basin is among the most productive swamps globally and is the largest contiguous swamp in North America. However, **Atchafalaya Basinkeeper** estimates that fossil fuel and other interests have degraded or lost <u>up to 75% of the swamp</u>. Proposed projects like East Grand Lake, which proposes cuts along distributaries of the Atchafalaya River to move more river water into the cypress/tupelo swamps, are ostensibly being pursued to improve water quality. However, ABK has been observing that with increased water flow from the river from different projects, sediment has been pouring in, and irreversibly changing this precious ecosystem.

Volunteer Pilot Scott Humphries provided a flight for ABK during the historic drought of late 2022, which enabled the Basinkeeper to observe and document new areas of sedimentation previously not visible under a few inches of water.



November 2022 ended with pollution watchdog and media flights with Volunteer Pilot Brian Robbins. Healthy Gulf, Sierra Club, and a journalist from The Lens over Cancer Alley, Plaquemines Parish where an LNG terminal is being built, the lower Mississippi River, and the still-leaking Taylor oil platform with a temporary, floating containment and collection system. Overall, they discovered at least nine instances of air or water pollution and have filed corresponding environmental reports. While these instances alone may not be deemed catastrophic, they show that cumulatively, South Louisiana, especially Cancer Alley, is overburdened with pollution and communities cannot and should not have any more polluting industries like Formosa Plastics move in.

Evidence of the effectiveness of these flights was reaffirmed when **Healthy Gulf** noted that Atalco Gramercy LLC had sprayers going to reduce the amount of dust/particulate matter emitted into the air during ship loading. This comes after Healthy Gulf made complaints about plumes of high opacity from dust/particulate matter heading into residential areas, spotted during a flight in February.



Healthy Gulf spotted, documented, and filed a pollution report for coal and/or petroleum coke in the Mississippi River, flowing from a barge unloader at United Bulk Terminals Davant LLC. Flight courtesy of SouthWings Volunteer Pilot Brian Robbins.



Healthy Gulf spotted, documented, and filed a pollution report for a 100 foot high opacity plume of dust from a bulk cargo hold at the ADM Grain River System Inc - Reserve Facility. Flight courtesy of SouthWings Volunteer Pilot Brian Robbins.



Due in part to complaints filed by Healthy Gulf in February, Atalco Gramercy LLC had sprayers going to reduce the amount of dust/particulate matter emitted into the air during ship loading. Flight courtesy of SouthWings Volunteer Pilot Brian Robbins.



TEXAS

In February, SouthWings welcomed its first ever volunteer pilot based in Texas, <u>Scott Humphries!</u> Scott enthusiastically helped out with flights in Louisiana, and in June piloted the first ever Texas flight! The flight, planned with **Healthy Gulf** and **Sierra Club** and carrying one passenger, investigated the <u>Freeport LNG facility explosions</u> that have rocked the global LNG market and left locals with questions about emergency management and safety. It also documented sprawling local industry along the coast area. Scott wrote about his experiences in his <u>professional blog</u>.

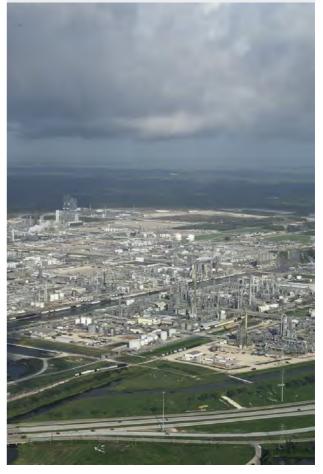
To finish out the year strong, **Healthy Gulf** collaborated with **Air Alliance Houston** and **Texas Health and Environment Alliance** on a flight with Scott over the Houston Ship Channel to create baseline documentation of the channel and polluting industrial facilities.



The Freeport LNG export facility next to the Quintana Island beaches, after June's explosions. Photo by Naomi Yoder, Healthy Gulf. Flight courtesy of SouthWings Volunteer Pilot Scott Humphries.

I hadn't been to Freeport before, so I didn't appreciate the density of the industrial development there [until the flight]. -Naomi Yoder, Healthy Gulf

Some of Freeport's sprawling industry that sits along the Texas coastline. Coastal fossil fuel infrastructure is increasingly vulnerable to climate disasters, while at the same time, fueling climate change. Photo by Naomi Yoder, Healthy Gulf. Flight courtesy of SouthWings Volunteer Pilot Scott Humphries.





MISSISSIPPI

In May, SouthWings Volunteer Pilot Tim Walsh completed a flight with **Cherokee Concerned Citizens** over industry in Pascagoula. The group is using the surveillance and information gathered from the flight to fight pollution in their <u>subdivision which has unusually high cancer rates</u>. They are in the process of not only using the images to bolster their regulatory efforts, but also to educate community members via their <u>website</u> and <u>Facebook page</u>.

ALABAMA

In September, Volunteer Pilot Robert Searfoss and **Hurricane Creekkeeper** John Wathen flew the Hurricane Creek watershed to document excessive herbicide use by Alabama Power. The loss of vegetation was causing erosion of banks and sediment pollution.

Fortunately, Hurricane Creekkeeper was able to collect ample evidence of the problem and brought it to Alabama Power's attention for a speedy resolution. Photo documentation and the process are detailed in the Creekkeeper's <u>blog</u>.

Yes a drone is handy but you can't see this from a drone.
Without SouthWings, many of the pollution sources I report on would go unnoticed. I can be readily trespassed from accessing property from the ground but there are NO trespass laws in the sky.

-John Wathen, Hurricane Creekkeeper



Herbicide application along the Hurricane Creek watershed was causing erosion into the waterway from loss of vegetation. Photos like this one moved Alabama Power to decrease herbicide use and better educate sprayers. Photo by John Wathen and flight courtesy of SouthWings Volunteer Pilot Robert Searfoss.



FLORIDA

SouthWings' presence in Florida is growing. In May, Volunteer Pilot Mike Guidry flew **Save Our Soundside** to document irresponsible development of wetlands leading to flooding and degraded ecosystems in the panhandle of Florida. SOS continues to use aerial photos and videos to <u>educate the public on their social media</u>, <u>hold developers responsible</u>, and <u>advocate for policy change</u> with officials



Dara Hartigan of Save Our Soundside testified for policy change and enforcement, using photos and video from her SouthWings flight. Source: <u>Facebook</u>

In the wake of Hurricane Ian, SouthWings Volunteer Pilots Christopher Noth and Rick Welch flew several flights to check for pollution in the Tampa Bay and Orlando areas with partners **Healthy Gulf** and **CLEO Institute**. Justine Noth assisted with photography on Christopher's flight.

66

SouthWings' service and attention was impeccable and timely. They helped us greatly in prioritizing and recommending areas in need of service. Fortunately for Tampa, we had minimum damages.

-Betty Jean-Jeremie, Program Manager, CLEO Institute



PAGE 45 JANUARY 2023



We had a great flight on Saturday morning and I was able to gather some excellent visuals of Red Tide and Hurricane Ian aftermath. Christopher was professional, courteous and knowledgeable on the local issues. We at the Tampa Bay Times are incredibly grateful for the opportunity!

-Max Chesnes, Environmental Reporter for Tampa Bay Times

NEWS / ENVIRONMENT

We flew above the Red Tide blooms offshore of Tampa Bay. Here's how it looks.

The toxic algal blooms lingered for miles just offshore of Pinellas County this weekend.











A Red Tide bloom lurks just offshore of John's Pass, between Made is Beach and Treasure Island on Saturday, Beachgoers were just feet away from the toxic algae, which can cause respiratory problems and fish kills at high concentrations. [MAX CHESNES | Times]

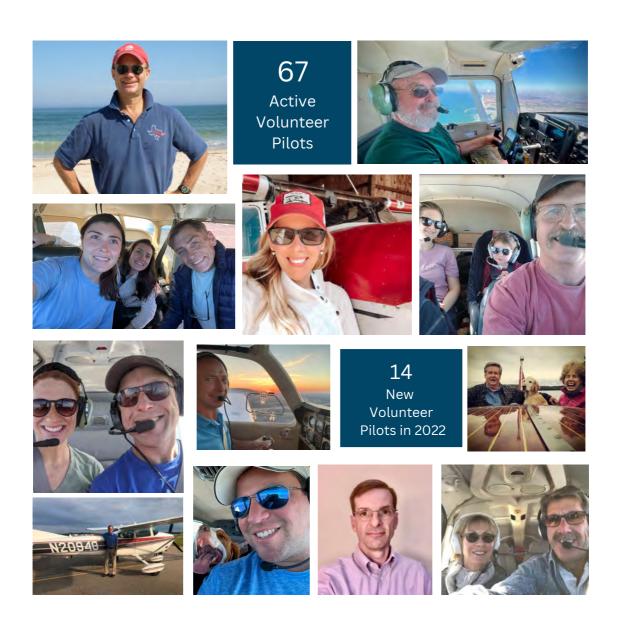
By Max Chesnes Times staff

A few days before Christmas, **Surfrider Foundation** and the **Tampa Bay Times** took to the air with Volunteer Pilot Christopher Noth to monitor and document a Red Tide event off the coast of Tampa. The resulting Tampa Bay Times article not only educates the public about Red Tide events and resources for residents, but also highlights their experience working with SouthWings and Surfrider Foundation to provide coverage.



VOLUNTEER PILOTS

SouthWings' Volunteer Pilot roster is full of generous, talented and inspiring individuals. We are grateful for each and every one who chooses to devote their time, energy and resources to the restoration and protection of the ecosystems of the Southeast. Pictured below are some of the new volunteers that have been onboarded this year!



That's a 15% net increase in Volunteer Pilots over the past 12 months.



2022 VOLUNTEER PILOT ROSTER (SOME PILOTS ARE OMITTED BY REQUEST)

CHESAPEAKE (14 TOTAL)

MARYLAND

Ron Baker : Stephen Haggard Jeremy Jacobsohn > John Sapienza Ken Shaffer 📂

DISTRICT OF COLUMBIA

Larry Petro 🔫 Tim Burtch

VIRGINIA

Dave Brubaker Brian Creed 🛹 Glenn Sanders Paul Werbin

APPALACHIA TO ATLANTIC (31 TOTAL)

WEST VIRGINIA

Scott Simonton > Donald Sutherland >

TENNESSEE

Joe Creecy Jay Mills 🟏 Micheal Spurgeon

ILLINOIS

David Warner

NORTH CAROLINA

Frank Bell 🕌

Richard Embry Hap Endler 🛁 Art Falk Bill Kahn John Leder Doug Oakley > Holliday Obrecht > Peter Stauble 📂 Bob Thomason Rolf Wallin Rankin Whittington

GEORGIA

Steve Ashby > David Asman 🖫 Woody Beck > Michael Henley Tim Moran **Brian Robbins Robert Searfoss** John Steward Wendell Todd

SOUTH CAROLINA

Chris Carmel Jon Engle Kimberly Métris Georgina Rinehart Landon Thorne

GULF (20 TOTAL)

FLORIDA

Les Abend Mark Andrews Roy Brewer 🥍 Hart Fessenden Mike Guidry **Christopher Noth** Rick Welch

ALABAMA

Jared Savage Bryan Tauchen Charles Welden

MISSISSIPPI

Tim Walsh

LOUISIANA

Emmet Bartholomew > Owen Bordelon > **Leonard Guidry** Ken Knevel > Lance Stuke >

TEXAS

Scott Humphries





New recruit within past 12 months



5+ years of service



10+ years of service



MEET OUR STAFF

We are grateful to our staff working behind the scenes to support this great work across the Southeast.



MEREDITH DOWLING
EXECUTIVE DIRECTOR



VIRGINIA RICHARD
GULF PROGRAM MANAGER



LAURA EARLY EASTERN PROGRAM MANAGER



CHELSEA EASTER
OPERATIONS AND
VOLUNTEER PILOT
MANAGER

