



RICE STEWARDSHIP

Annual Report 2021

“Louisiana NRCS has taken measures to adapt, grow capacity, and serve landowners, producers, and partnerships. All while we remain committed to our motto, “Helping People Help the Land.”

- Chad Kacir, NRCS State Conservationist



Pictured: (left to right) Chad Kacir, NRCS, Hine Unkle, Rice Producer

Leadership Message

U.S. Rice Production in the New Millennium – Change Prevails

The USA Rice-Ducks Unlimited Rice Stewardship Partnership reached an important milestone in 2021 and that is over 1,000 individual and unique farms served for the betterment of working ricelands, water, and wetland wildlife. One might ask “is this significant progress since our inception in 2013”? Please allow us to put things into perspective.

Based on research by nationally known agricultural economist, and friend of the rice industry, Dr. Nathan Childs, change indeed prevails in today’s U.S. rice industry. As the total number of farms growing rice declined 52% from 9,627 in 1997 to 4,637 in 2017 (most recent census), total planted rice acres also dropped from about 3.5 to 2.5 million acres. However, the average acres of rice per farm expanded significantly now up to over 600 acres per year. And yields per acre are at an all-time high. Therefore, Rice Stewardship has reach 22% of farms in operation today and these farms are aggressively growing more acres and witnessing unprecedented yields.

Dr. Childs and colleagues go on to explain that the most significant change in rice production technologies in the new millennium is the introduction and adoption of new rice seed varieties. Southern rice producers increasingly planted hybrid and non-genetically modified herbicide-tolerant seed. Precision farming technologies also proliferated, especially the use of yield monitors, global positioning systems for rolling equipment (e.g., spray rigs), automation for stationary equipment (e.g., irrigation wells), and more. The adoption of new technologies in rice farming pushed per-acre production costs higher, but as rice yields also increased, higher costs were offset. Rice Stewardship is proud to have RiceTec Seed Company and Horizon Ag as long-time financial sponsors and technical advisors. And indeed, increasing technology efficiencies on the farm are a mainstay of our everyday operation.

Another mainstay of our everyday operation is the Rice Stewardship field staff and the technical assistance provided to rice producers and the USDA Natural Resources Conservation Service (NRCS) Field Offices. In this annual report you will see more on the depth and diversity of this field team, from our veterans to our “Women of Rice”, from expertise in program administration, to irrigation, to advancing technology as detailed above.

Indeed, change prevails in the world today and within our U.S. rice industry. And Rice Stewardship embraces this change. May we not rest on our laurels and successes with the first 1,000 rice farms served but remember we have another 3,000+ farms in front of us. We thank the NRCS, our supplychain financial sponsors, and many other in-kind supporters, for the progress made to date. Let us continue the momentum, the economic and environmental impact, through tomorrow and beyond. And let us all remember what is good for rice is good for ducks!



Jeff Durand
Co-Chairman



Al Montna
Co-Chairman



Women of Rice

By Emily Austin, Communications Specialist, Ducks Unlimited

Pictured: Michaela Lee



Rice is one of the world's most important crops. Each year the U.S. rice industry distributes nearly 40 million pounds of rice around the world to combat food insecurity. Rice is also important to waterfowl, providing critical habitat in the most important migration and wintering landscapes of North America. The USA Rice-Ducks Unlimited Rice Stewardship Partnership (Rice Stewardship) has been working side-by-side with rice producers to help keep farms producing quality crops and vital habitat.

This overall effort is done thanks in no small part to all those who work behind the scenes making sure producers have the technical assistance, guidance, and access they need. Technical assistance is provided by 18 dedicated Conservation Specialist, including our Women of Rice: Misty Adams, Amy Carr, Michaela Lee, Megan Martin, Annie Pearson, and Emily Woodall. "The people who work behind the scenes of Rice Stewardship are not always who you think they are," said Scott Manley, DU Director of Conservation Programs. "We have a very diverse group of individuals, including 6 women, who work tirelessly to ensure our producers have the resources they need to sustain the future of rice."

Amy Carr, who works with producers in south Arkansas, has been part of the rice team for 3 years. Her work includes spending time with farm families and helping them work towards improved irrigation practices. "I have been involved with agriculture in one form or another all my life," Amy said. The daughter of a farmer and an avid sportsman, it is clear to see that conservation is a passion of Amy's, not just personally, but professionally as well. "I grew up here, my family is here, I've known some of these producer families my whole life. When I retired from Bayer, I knew I still had a lot to give back to my community. When I had an opportunity to help producers through Rice Stewardship, there wasn't a moment's hesitation. I knew this was something I needed to do."

Covering north Arkansas is Misty Adams, mother of 5, who is also working on her degree in Ag Business at Arkansas State University. "Being able to help producers enhance their farms as well as provide habitat for migrating waterfowl has been an amazing experience," said Misty. "Being part of a program that allows me to not only have a positive impact on my community, but also spend time with my family and further my education, has truly been life changing." Misty has been able to work with producers to make better use of surface water for irrigation via strategically placed tailwater canals and pumps.

Rice Stewardship wouldn't be the program it is today without the leadership of USA Rice and the technical assistance and support they provide. "Working for USA Rice gives me a unique perspective when it comes to Rice Stewardship," said Emily Woodall, Manager, Rice Conservation Services for USA Rice. "Being a voice for our producers, hearing what they need, and being able to secure additional conservation funding has been very rewarding." Emily, who has been a part of the program since 2017, works with state Natural Resources Conservation Service (NRCS) offices and other Partnership staff to ensure rice producers are receiving the financial and technical assistance they need as well as ensuring grant reporting requirements are being met.

Michaela Lee, who joined the Rice Stewardship team in 2019, works with producers in south Louisiana. "When I joined USA Rice and DU in May of 2019, I never imagined the impact our work would have for producers," Michaela said. Her work with the rice growers of Acadia Parish includes surveying fields for irrigation land leveling, taking measurements for grade stabilization structures, providing technical assistance for management practices such as nutrient management, reduced tillage and pest management. "I truly love working with farmers helping

them better their business. Seeing growers become more successful through programs such as Rice Stewardship assures me that we are using practices that are best suited to make their operation improve and grow each year.”

One of the most important behind the scenes part of Rice Stewardship involves mapping and data processing. This is where Megan Martin and Annie Pearson come in. “We have been working on a new method of winter water classification of rice fields,” Megan said. “Here, we are evaluating if it plausible to use satellite imagery to determine if fields have water, rather than having our field staff make visits to our growing list of farms, to determine if every single field is holding water.” The finished product would ideally be a report for each farm depicting where fields are flooded. While this project is still in the experimental stage, Megan is hopeful that this will be the future of winter water classification. Megan,

who joined Rice Stewardship in 2020 after finishing her master’s degree at Mississippi State University, has also been working on a project to determine the return on investment for surface water irrigation systems.

“All the data we collect each year from producers helps the program evolve,” said Annie Pearson. Annie started as an intern working on Rice Stewardship in 2019. She recently earned her bachelor’s degree from Delta State University and currently serves a vital role as part of the Rice Stewardship team. “In order to have a sustainable program, we must follow the data and make adjustments along the way.” Growing up in the Mississippi Delta surrounded by farms, Annie learned a lot about agriculture. “Rice Stewardship has allowed me to work with some really great producers. Being able to work with and help those producers is truly fulfilling.”



They are daughters, sisters, wives, and mothers. They are scientist, surveyors, economists, and producers...

THEY ARE THE WOMEN OF RICE.

For the Rice Producer

Diversification of Technical and Financial Resources

By Scott W. Manley, Ph.D., Ducks Unlimited, Director of Conservation Programs

Today's world is no stranger to diversification. Financial diversification means lowering your risk by spreading money across and within different asset classes, such as stocks, bonds, and cash. It's one of the best ways to weather market ups and downs and maintain the potential for growth. Agricultural diversification, that is growing a diverse selection of crops, can expand your markets and offset commodity price swings. Overall, the economic picture improves with strategic crop diversification. With our goal of conserving working ricelands, water, and wildlife, we too must diversify our technical and financial resources for you, the rice producer. Beyond our foundational progress with the USDA Regional Conservation Partnership Program (RCPP), here's how we are diversifying our efforts today.

Our Efforts:

Cooperative Agreements for Technical Assistance

The technical assistance needed for rice producers and NRCS program delivery has far outstretched the 13 RCPP awards to date. To weather the up-and-down support of these various projects over the years, the NRCS has awarded Rice Stewardship cooperative agreements for added technical assistance in Arkansas, Louisiana, Mississippi, and Texas. Here contributions from our financial sponsors are leveraged for additional NRCS technical assistance funds to purely support boots-on-the-ground. The total value of the cooperative agreements in place is \$2.5 million and will help ensure support to producers and NRCS Field Offices through 2024.

Louisiana's Deepwater Horizon Nutrient Reduction Strategy

The next decade will host unprecedented opportunities for the Gulf Coast rice industry to benefit from the Deepwater Horizon remediation funding streams. What is called the Louisiana Trustee Implementation Group is developing restoration projects and plans to accomplish the significant work needed for the Gulf. Development of these projects is guided by an Implementation Plan finalized in 2016 as part of the legal settlement with British Petroleum. We have received the first award of \$5.3 million to improve water quality by reducing nutrient runoff from crop and grazing lands through targeted implementation of conservation practices in critical areas within select watersheds. We will remain vigilant to additional Deepwater Horizon opportunities in the coming months and years ahead.

California's Drought Relief Waterbird Program

In response to extreme drought-related concerns for Pacific Flyway waterbirds, the California Rice Commission has teamed up with the California Department of Water Resources (DWR) to fund a special \$8.0 million Drought Relief Waterbird Program. This program seeks to create waterbird habitat through the operation of groundwater wells to winter flood rice fields for migratory birds. In normal years the rice industry provides roughly 270,000 acres of post-harvest flooded rice and 7 to 10 million migratory waterbirds have learned to rely on these surrogate wetlands. Current drought conditions have restricted surface water use and we expect that without any additional programs there will only be 20% of normal flooded rice acres this year. In partnership with DWR the Commission will increase the number of flooded acres for migratory waterbirds with this critical program. Given the significant need for habitat and the constrained timeframe this program will be rolled out on an expedited schedule in early fall 2021.

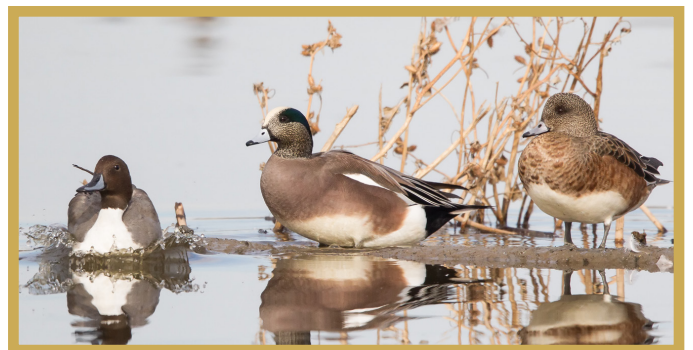


PHOTO: CALRICE.ORG



PHOTO: CALRICE.ORG

A Message from the California Rice Commission

By Paul Buttner, Manager of Environmental Affairs

This year we expanded our habitat work to accomplish new innovative wildlife habitat conservation outcomes. These efforts were implemented jointly by our two California Rice organizations working collaboratively to benefit the Pacific Flyway--the California Rice Commission and the California Ricelands Waterbird Foundation (Foundation).

We've been able to do all this work with significant support from NRCS and by leveraging our Foundation's donor contributions to attract even more investments. Our current NRCS-supported activities include cutting-edge work through our newly branded conservation program delivery system called Bid4Birds, the use of winter-flooded rice fields to grow salmon with the goal of increasing their survival out to the Pacific Ocean, and efforts to increase sustainable funding sources for the Foundation.

Using funds from our many donors, we've expanded our core mission of providing world class habitat on flooded rice for shorebirds. We now have the dedicated services of Luke Matthews, our waterbird biologist, working for the California Rice Commission who oversees our increasing number of projects. He and our conservation partners visit our project sites regularly to monitor field conditions and ensure that our donors' investments result in high quality habitat for all birds that benefit from programs. Our plans for next year include a renewal of our salmon work to pilot-test the new interim conservation practices on full-scale farms, our first coordinated effort to provide quality nesting cover habitat throughout the full nesting season, and expanded efforts to double our shorebird habitat acres in the spring and fall seasons.

Here is what we've accomplished over the past year

- › Ongoing habitat enhancement projects including 3,500 acres of shorebird habitat through Bid4Birds and 1,000 acres of nesting waterfowl habitat through RCPP.
- › Continuation of Phase I of our \$1.4 million salmon habitat pilot project with University of California-Davis and our conservation partners to develop techniques to use winter-flooded rice fields to help salmon. We had great results from our 2020 field work, where there was a four-fold increase of our rice-field reared salmon making it safely to the ocean over our controls (no rice field rearing). Our dedicated project website, www.salmon.calrice.org, includes great photos and video clips of our field work on this project along with a full listing of our many donors including NRCS and Syngenta.
- › Initiation of our Drought Relief Waterbird Program with California Department of Water Resources in response to extreme drought-related concerns for Pacific Flyway waterbirds.

More information about California Rice activities can be found at www.CalRice.org and www.CalRiceWaterbirds.org

Luke Matthews, left, works with producers to monitor field conditions. He oversees many projects to ensure that our donors' investments are being used to benefit all birds.



PHOTO: CALRICE.ORG

Brandon Bauman

Arkansas' Grand Prairie Producer

By Emily Austin, Communication Specialist, Annie Pearson, Rice Technician, Ducks Unlimited

Located just outside Stuttgart, Arkansas, Bauman Farms is a prime example of how Rice Stewardship works to sustain rice production through conservation of land, water, and wildlife resources. “When I first started farming, I rented some land not far from where we are today. It was a crop share that needed a lot of conservation improvements,” said Brandon Bauman. “I went to the NRCS to ask for help.” Brandon learned about Environmental Quality Incentives Program (EQIP) and Conservation Reserve Program (CRP) and began working on improving irrigation practices based on their recommendations.

“My dad was a farmer, and I grew up watching him work the land. When I graduated from college, I used my father’s equipment to work the farmland I was renting at the time.” Brandon said. Eventually Brandon was able to buy his own equipment and in 2014 when his father retired from farming, Brandon took over 100% making Bauman Farms a seamless 7,000-acre operation.

Working the land and being able to see the link from farm to table has been an inspiration to Brandon. “Being a part of something from the beginning, seeing it take hold and grow, is what farming is all about. I’ve also been involved with Rice Stewardship since its beginning. The impact it has had on countless farmers and in turn consumers has been nothing short of amazing.”

“There are a lot of mouths to feed around the country and around the world, that depend on rice,” Brandon said. “We have to be responsible with the resources we have. Rice Stewardship helps farmers develop best practices when it comes to preparing the soil and irrigation practices. Practices that we can implement, improve upon, and sustain year after year.” Practices like using surface water reservoirs for irrigation. “Thanks to targets and goals set forth in Rice Stewardship, our farm operates with more than 50% surface water irrigation.”

Brandon believes in being able to tell the story of working the land and being able to leave it better than he found it. He feels it is important to align with partners who hold true to this vision and support sustainable farming practices by overcoming challenges. One of the biggest challenges farmers face in Arkansas centers around groundwater decline therefore making surface water irrigation techniques so important.

Part of telling the story of farming and ensuring the future lies in educating the next generation. “An unexpected opportunity came out of COVID quarantines and lockdowns. We had a captive audience to teach about rice farming.” Brandon explained that when local schools shutdown in-person learning, students were looking for something to do, so he hired them to work on the farm. “It became a bit of a competition among the students. They would post on social media about what they were doing that day in the fields. There were a lot of kids who would never have thought about farming, out here doing just that.”

In addition to his work with Rice Stewardship, Brandon works with other producers by serving on the Riceland Foods Board, a role he has held for 9 years. He is also very involved with USA Rice and an active member of the Arkansas County Soil and Water Conservation Board. Brandon uses these various positions to help share perspectives on the relationship between rice and ducks.



PHOTO: CALRICE.ORG



PHOTO: BAUMAN FARMS

“There are a lot of mouths to feed around the country and around the world, that depend on rice.”
-Brandon Bauman

A Message From Louisiana NRCS

By Chad Kacir, NRCS State Conservationist



Chad Kacir, NRCS State Conservationist, with Kona and Bureaux

As we wind down 2021 and prepare for the new year, I'm looking forward to new beginnings and continuing with the great work that we accomplished in 2021. Together, we emerged on the other side of the challenges of COVID 19 stronger, wiser, and more connected to each other and to the land than ever before. Louisiana NRCS has taken measures to adapt, grow capacity, and serve landowners, producers, and partnerships. All while we remain committed to our motto, "Helping People Help the Land."

Although I'm not new to NRCS, I am relatively new to Louisiana. I began my tenure as the Louisiana State Conservationist in December of 2019. I'd like to share my conservation story with you. I grew up in the south Texas town of Victoria, Texas, graduated from Texas Tech University with B.S. in Agricultural Economics. It was while working in a private sector position that I realized I was missing out on my passion for agriculture, and eventually owned and operated a successful cow-calf operation. It was during those years I was introduced to NRCS and learned first-hand about the technical expertise and cost share assistance it provides to farmers, ranchers, and forest landowners.

I also learned about the integral role the local Soil and Water Conservation Districts (SWCD) play in the delivery of conservation practices to private landowners. I was so impressed with NRCS and my local SWCD and the services they provided to me, I decided to pursue a career with NRCS. My first job was as a soil conservationist at two locations in Texas. Next, I became the District Conservationist in Oahu, Hawaii, and then the Assistant State Conservationist for field operations in Oklahoma. When the opportunity to come to Louisiana presented itself, my wife and I were excited to make the move!

One of the major accomplishments that NRCS has achieved since I arrived in Louisiana is an adjustment to the internal organization of our offices throughout the state. To better serve our producers, ranchers, and forest landowners, we made some operational adjustments by standing up Louisiana Resource Units (LARUs). This system groups local field offices into areas each with a District Conservationist, a lead planner, soil conservationist and each area having access to specialists who can assist landowners with specific resource concerns. This adaptation of organizational structure allows our 44 offices located throughout the state to be more flexible and better able to assist customers quickly.

Another major accomplishment is the recruitment and on-boarding of additional NRCS staff to better serve our customers. Over the last year, more than 50 new employees have started or are continuing their careers with Louisiana NRCS. We have been fortunate to hire the best and the brightest from within Louisiana and from across the US. Each of these new employees brings a fresh perspective along with a desire to assist producers and provide excellent customer service.

Lastly, we are extremely proud of the NRCS Pathways Program (student internship) that attracts a diverse group of students from universities across the state and country to learn about natural resources conservation as a student intern. During internships students learn about NRCS and explore potential careers while still in school and receiving a stipend, an extremely important perk for college students! Our hope and the goal of Pathways is students who intern with Louisiana NRCS will become the next generation of conservation professionals.

These are just a few of the Louisiana NRCS accomplishments over the last two years. None of which would have been possible without the dedication and professionalism of the 202 employees located across the state. My belief is that if we operate and function as a team, we can provide the most up-to-date conservation information and expertise to our customers. As the eighth State Conservationist for Louisiana, my commitment is to you, our customers, and partners, as we continue the legacy of strong conservation in our state. My door is always open. Please do not hesitate to reach out to me with ideas, questions, or concerns.



PHOTO: CALRICE.ORG

“Over the last year, more than 50 new employees have started or are continuing their careers with Louisiana NRCS. We have been fortunate to hire the best and the brightest from within Louisiana and from across the US. Each of these new employees brings a fresh perspective along with a desire to assist customers and provide excellent customer service.”

- Chad Kacir, NRCS State Conservationist

The Schiurring Family

Texas Gulf Coast Producer

By Slade Schiurring; Lance Cheung, USDA Photographer; Mary Smith, Wharton County SWCD;
Dennis Neuman and Raul Villarreal, Ducks Unlimited

Since 1910, four generations of the Schiurring family have harvested rice on the 3S Ranch near El Campo in Colorado and Wharton counties. The family grows approximately 1,500 acres of long grain rice annually and markets through American Rice Growers, Inc.

Third generation, J. Brent Schiurring, was one of the first farmers to grow organic rice and helped start the organic movement in Texas.

Besides rice farming, the family runs a waterfowl hunting operation on the ranch dating back to the late 1940s. They helped pioneer commercial waterfowl hunting in their local area of Texas. “Rice farming and duck and goose hunting go hand-in-hand. What is good for rice, is also good for ducks,” said owner and fourth generation producer Slade Schiurring. We flood about 1,500 to 1,800 acres a year for the hunting operation. Tens of thousands of wintering waterfowl including ducks, geese and sandhill cranes, roost and feed on our farm and neighboring farms each year.”

The Schiurring’s use conservation programs to improve their rice fields, boost production and waterfowl populations, all the while increasing their efficiency and reducing fuel costs. “I was lucky enough to carry on our family history of rice farming and our waterfowl hunting operations alongside my mom and dad after I graduated from Texas A&M University in 2016,” Slade said. “I have served on the board of the Wharton County Soil and Water Conservation District (SWCD) since 2019 and have been a local Ducks Unlimited volunteer since 2010.”

The family received conservation technical and financial assistance from the NRCS through the Environmental Quality Incentives Program (EQIP) to implement land leveling for efficient use of irrigation water. The family also created additional wildlife habitat through the Conservation Stewardship Program (CSP). Both efforts were part of a larger effort by NRCS and the Rice Stewardship Partnership.

“Land leveling and improving our rice farms would be nearly impossible due to the cost of building the infrastructure on our fields and farm for rice production,”

said Slade. “Each bench levee we construct has two to three aluminum water control structures to help control water levels in each bench cut. Land leveling and installing these permanent water structures not only saves on water usage and the overall cost of water, but also on labor and time as well. We now can use rainfall better than ever because we can hold more rainfall due to bigger and better levees and not having to deal with blow outs causing water loss on conventional levees adding to our advantage savings on all of the above.”

After harvest is complete, Slade always leaves crop residue in the fields. This helps protect the land from wind and water erosion but also provides food for wintering waterfowl. The residue aids in conserving soil moisture, increasing water infiltration, and improving soil tilth.

“We have also done a lot of work with DU, NRCS, and Texas Parks & Wildlife Department through the Texas Prairie Wetland Project (TPWP),” said Slade. “TPWP is a key program for waterfowl conservation alongside the larger Rice Stewardship Partnership that is helping to create and restore the loss of wintering waterfowl habitat on the Gulf Coast of Texas.”

“The Schiurring’s are one of more than 100 Texas rice farming families voluntarily participating in the Rice Stewardship,” said Kirby Brown, conservationist outreach biologist for DU. “Through these partnerships, we can target NRCS program funding to assist producers in conserving water for irrigation, improving water quality, and providing habitat for waterfowl, shorebirds, wading birds, raptors and many other wildlife species. These valuable conservation incentive programs are a win-win-win for rice producers, NRCS, the public, and particularly our wetland wildlife.”

Outstanding conservation efforts were recognized in 2019 when the Wharton County SWCD honored Slade as their Outstanding Farmer of the Year. Slade said he wants to be able to pass the rice farming operation onto his future children one day. He, along with his ancestors, knew that taking care of the land is the best way to ensure this family’s legacy continues.

**“Rice farming and duck and goose hunting go hand-in-hand.
What is good for rice, is also good for ducks.”**

- Slade Schierring



PHOTO: USDA

Trusted Advisor: *Bob Young*

By Emily Austin, Communication Specialist, Annie Pearson, Rice Technician, Ducks Unlimited

What is it like to make natural resources conservation in agriculture a major part of your life for over forty years? If you spend much time with Rice Specialist Bob Young, you will come away with an understanding of his passion and commitment to helping producers and wildlife alike. Bob shares his knowledge and experiences with rice producers, partners, fellow employees, and others on an almost daily basis.

As a teenager, Bob worked on a family member's farm where he developed a love for the land and recognized that more attention needed to be given to agricultural land use. Bob began his career with the NRCS in the summer of 1979 as a technician while attending Arkansas State University (ASU). After graduating in 1982 with a Bachelor of Science in Agriculture, Bob went to work for the Louisiana NRCS. Over a 6-year period as a soil conservationist and district conservationist, Bob was instrumental in expanding no-till farming and worked on watershed projects for flood and erosion control and water quality improvement. Returning to Arkansas in 1988 Bob was promoted to Area Resource Conservationist. One of Bob's proudest achievements was bringing small farmers and the community together to form one of the best farmers' markets in the state on the ASU campus. Bob was promoted to the Assistant State Conservationist

for Field Operations in 2010 where he managed a multi-disciplinary team throughout Northeast Arkansas.

Although Bob retired from NRCS in 2014, he worked as an agronomist under contract with them and managed the farmer's market. He also formed and managed agreements with a non-profit corporation to provide contract employees to the NRCS in multiple counties.

In August of 2015, Bob was hired on with Rice Stewardship. Bob is passionate about Rice Stewardship and finds the program very rewarding. When asked what he would consider the biggest challenge with Rice Stewardship Bob said, "not enough funding". He sees many good projects on the farms he works with go unfunded every year. When asked what advice you would have for rice producers, Bob commented that he would like to see more rice producers thinking about managing at least a portion of their farm for ducks. "Rice fields contain highly nutritious food for waterfowl. Ducks dabble in the shallow water for waste grain, weed seeds, and aquatic invertebrates. "I feel blessed to have enjoyed conservation work for over forty years. Rice Stewardship fits my life and provides a great deal of satisfaction knowing that I get to help others that believe conservation in agriculture will provide sustainability for future generations".



PHOTO: EMILY AUSTIN, DUCKS UNLIMITED

Trusted Advisor: *Dave Wissehr*

By Emily Austin, Communication Specialist, Annie Pearson, Rice Technician, Ducks Unlimited



PHOTO: NRCS

Dave Wissehr has been part of Rice Stewardship as a Rice Specialist for more than 6 years. “It was opening day of the Missouri 2015 early teal Season. I was in our local grocery picking up ingredients to make stir-fried teal for dinner that night,” Dave recalls when thinking about how it all started. “My phone rang it was an unknown number, but I decided to answer it anyway, it was Mark Flaspohler, Director of Conservation Programs with Ducks Unlimited in Missouri. He wasted no time offering me a job with Rice Stewardship as a Rice Specialist.”

Raised in South St. Louis, Missouri, Dave graduated from St. John the Baptist Catholic High School and then went on to complete course work for a degree in Ecology/Wildlife Management from Lindenwood College in St. Charles, Missouri.

Dave worked for 35 years with the Missouri Department of Conservation (MDC) in a variety of positions. In 1986 he moved to Southeast Missouri as a Private Lands Specialist for the Department, working extensively with landowners in an eleven-county area. During this time much of his work was assisting farmers as they applied for and navigated their way through programs like the Conservation Reserve Program (CRP), Environmental Quality Incentive Program (EQIP) and Conservation Stewardship Program (CSP).

After retiring from MDC, Dave went to work for the NRCS. This position allowed Dave to work with landowners who enrolled in the Wetland Reserve Program (WRP), later known as Wetland Reserve Easement (WRE) program.

Dave is a people person. Well known to producers, NRCS staff and other related agency partners, he does his best to see all program participants at least twice yearly. As well as being versed in rice production it doesn't hurt that he can talk “ducks”. Rice producers are often duckaholics too!

In his current role as a Rice Specialist, Dave works with NRCS staff and rice farmers in nine counties, promoting conservation and encouraging rice producers to apply for assistance through Farm Bill programs. Dave attends field days, often serving as an instructor, promoting program practices that assist rice farmers as they increase production while reducing costs and improving natural resource conservation. Program and field monitoring is also a significant part of Dave's responsibilities. Over the last three years he has assisted in the development of a satellite-based monitoring system which will hopefully reduce staff field time and miles.

We know that Dave is greatly trusted by rice producers and NRCS staff and is a significant player in the Rice Stewardship Partnership in Missouri.

OUR FIRST THOUSAND PRODUCERS

SALUTE

OUR RICE STEWARDSHIP TOP-TIER FINANCIAL SPONSORS

This year marks an important milestone for Rice Stewardship and that is 1,000 individual farms served for the betterment working ricelands, water, and wildlife habitat.

These first 1,000 farms, their owners, operators, workforce, and surrounding rural communities, salute our top-tier Rice Stewardship financial sponsors, who have collectively contributed over \$7.7 million dollars towards their support.



Nestlé' Purina PetCare Company joined Rice Stewardship in fall 2017, with goals of supporting conservation in the heart of their ingredient supplychain throughout the Mississippi Alluvial Valley and Louisiana/Texas Gulf Coast, with an extra focus on young and beginning farmers. Future efforts will include an expanded commitment to climate change solutions.



Walmart Foundation came on board winter 2016 to add great strength to on-farm conservation efforts. Initial focus was on production improvements, conservation practice persistence, and bolstering rural economies. Today, developing surface water sources for irrigation leading to groundwater savings has grown our overall effort.



Mosaic Company Foundation, a global leader in crop nutrition, has a vision of helping the world grow the food it needs. Focus areas include food systems, water, and community support. This is a hand-in-glove fit with Rice Stewardship who Mosaic has proudly supported since fall 2015.



National Fish and Wildlife Foundation is dedicated to sustaining, restoring, and enhancing the nation's fish, wildlife, plants, and habitats for current and future generations. Many believe the emergency response by rice producers, NFWF, NRCS, and Ducks Unlimited, to the 2012 Deepwater Horizon spill, was the genesis of Rice Stewardship. Either way, NFWF has been a top-tier financial sponsor since summer 2015.



Investing in communities where their workforce lives and works is a core **Chevron** value. Along Louisiana's Gulf Coast, Chevron focuses its efforts on helping create sustained economic growth by supporting environmental education and conservation training. Chevron was our first top-tier financial sponsor supporting Rice Stewardship since summer 2013.

Farm Credit Associations of Arkansas

By Emily Woodall, USA Rice, Manager of Rice Conservation Services

The Farm Credit Associations of Arkansas, the largest single ag lender in the state, is the first agricultural lending entity to invest in the Rice Stewardship Partnership. Arkansas is the largest rice-producing state in the country with many rice producers receiving loans through the Farm Credit Associations of Arkansas and serving on the respective boards of these member-owned associations.

“The Farm Credit Associations of Arkansas is one of the premiere ag lenders in our state that is truly customer-focused” comments Jeff Rutledge, a rice producer from Jackson county and a member of the AgHeritage Farm Credit Services Board. “As an organization, they are committed to protecting their customers best interests, sustaining our natural resources, and ensuring we as producers can remain profitable. This commitment is demonstrated in their contribution to the Rice Stewardship Partnership’s efforts.”

The Farm Credit Associations of Arkansas understands the importance of ensuring the success of the state’s rice producers. They recognize the positive financial impact that implementing voluntary conservation practices have on producers’ livelihoods, but also recognize that these practices can often be costly and risky to implement.

Greg Cole, CEO and president of AgHeritage Farm Credit Services states, “Conservation practices can deliver economic value for not only farmers, but also local communities, landowners, and their financial partners. The Farm Credit Associations are excited to support this work, expanding voluntary conservation opportunities for our members and Arkansas’ rice farmers.”

“This financial support will aid the Partnership in delivering our Regional Conservation Partnership Program (RCPP) projects on the ground.” stated Josh Hankins, USA Rice Director of Grower Relations and Rice Stewardship Partnership. “These funds allow us to continue to offer the technical assistance and outreach that is necessary for these projects to succeed.”

The Farm Credit Associations of Arkansas are part of the national Farm Credit System which has supported rural America since 1916. In Arkansas, each of the four independent associations is owned by its members and serves a different part of the state. Farm Credit of Western Arkansas serves the western region, AgHeritage Farm Credit Services serves the central region, Farm Credit Midsouth serves the eastern region, while Delta, Agricultural Credit Association, serves customers in the state’s four most southeastern counties. Collectively, their 11,000+ members include both traditional and non-traditional farmers, rural homeowners, livestock operators, and landowners.



PHOTO: FARM CREDIT ASSOCIATIONS OF ARKANSAS

Developing Surface Water for On-Farm Irrigation in the Mid-South

Phase I Results

By Scott W. Manley, Ph.D., Ducks Unlimited, Director of Conservation Programs

Over the last several years the NRCS in Arkansas, Louisiana, and Mississippi, in collaboration with many partners, has worked tirelessly with agricultural producers to improve irrigation efficiencies and reduce groundwater use. Programs like the Environmental Quality Incentives Program (EQIP) have been used to provide financial and technical assistance for practices such as irrigation water management, pump improvements and automation, soil moisture sensors, and more, all to reduce groundwater withdrawals while maintaining crop yields. Much progress has been made.

The next primary strategy for reducing groundwater use is more effective use of available surface waters for irrigation. Natural rivers, bayous, oxbow lakes, and drainage canals, along with constructed tailwater and on-farm reservoir storage (where feasible), all provide an ample source of irrigation waters that can be used first and foremost each growing season. Turning to available surface-water irrigation offers significant relief for groundwater resources. This coupled with efficiencies as stated above are the combined solution for stressed groundwater resources.

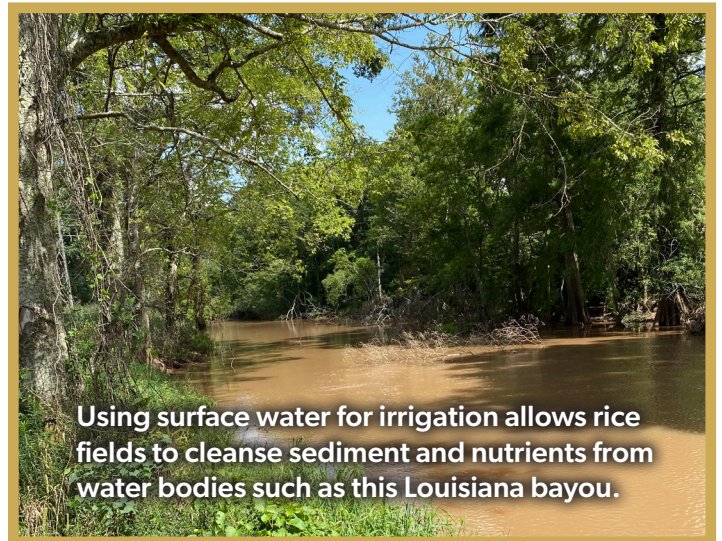
Over the last 2 years Rice Stewardship staff worked with Louisiana and Mississippi NRCS to hold EQIP sign-ups for surface water irrigation development and improvements. The table on the next page details general statistics and importantly, the amount of time these irrigation projects will take to pay for themselves, based upon surface water replacing groundwater use. Or in other words, what is the return on investment for the total project cost, and then just the producer's portion of that total cost.

Our Phase I results show that even if surface water replaced groundwater 100%, payback time for total project cost would range from 14 to 17 years in the Mississippi Delta, and 6 to 7½ years in Southwest Louisiana. However, with significant financial assistance from the NRCS and EQIP, the producer's out-of-pocket expense would be recovered in ≤4 years in the Delta and ≤2½ years in Southwest Louisiana.

As the proportion of annual irrigation supplied by surface water decreases, the payback time significantly increases. Based on our Phase I results it appears that any irrigation project supplying less than 25% surface water per year takes an excessively long period of time to return our investment.

From the 85 projects under our Phase I efforts, we learned much more about producer's perceptions and developing surface water irrigation projects. First, abundant surface waters need be in close proximity. Anything more than a quarter mile was deemed impractical to develop. Approximately 75% of producers were already experimenting with surface water irrigation and ready to expand their visions to more volume and more acres. And 70% of producers intended to convert their project acres to full surface water supply turning to groundwater only in the driest of years.

We have initiated Phase II of developing surface water for on-farm irrigation in the Mid-South. We plan to add another 80 projects by the end of 2023. Our current analyses have many assumptions such as crop rotations, ratios of surface and groundwater used, and differences in pump efficiencies based on pump type and size, fuel source, and static water levels. But we look forward to perfecting our rate of return on investment analyses going forward, and importantly, learning about overall project effectiveness and impact from our leading producers.



Using surface water for irrigation allows rice fields to cleanse sediment and nutrients from water bodies such as this Louisiana bayou.

SURFACE WATER FOR IRRIGATION – RETURN ON INVESTMENT

Phase I Results

PROJECT GENERAL TOTALS					
MISSISSIPPI DELTA	No. Projects	Total Acres	Total Costs	Producer Cost ¹	Annual Irrigation ²
		72	18,658	\$11,137,942	\$2,547,147

PROJECT GENERAL TOTALS					
SOUTHWEST LOUISIANA	No. Projects	Total Acres	Total Costs	Producer Cost ³	Annual Irrigation ⁴
		13	4,810	\$1,303,442	\$426,172

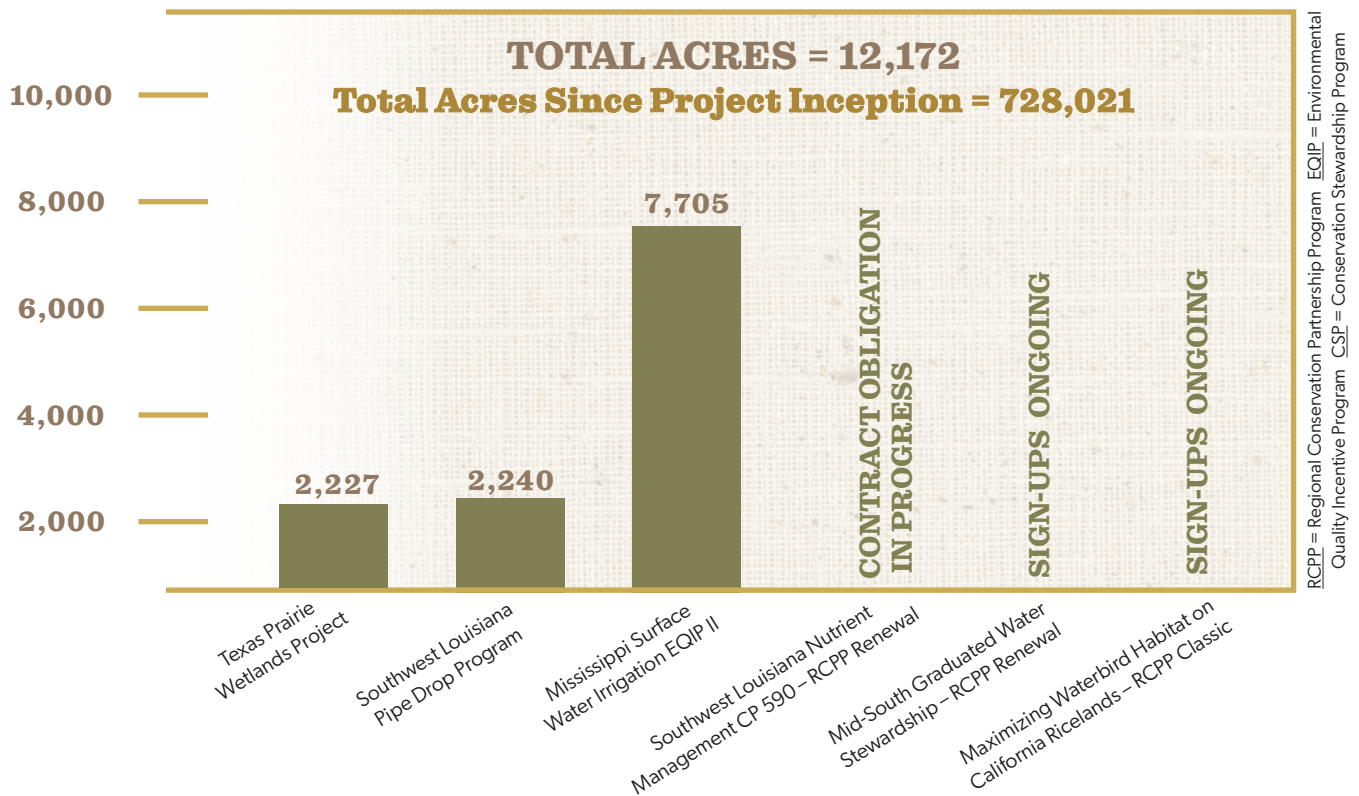
PROJECT PAYOFF TIME IN YEARS BY TOTAL AND PRODUCER ONLY COSTS									
MISSISSIPPI DELTA		100% Surface		75% Surface		50% Surface		25% Surface	
		Total	Producer	Total	Producer	Total	Producer	Total	Producer
	Diesel ⁵	14.1	3.2	18.8	4.3	28.2	6.5	56.5	12.9
Electric ⁶	17.4	4.0	23.2	5.3	34.7	7.9	69.5	15.9	

PROJECT PAYOFF TIME IN YEARS BY TOTAL AND PRODUCER ONLY COSTS									
SOUTHWEST LOUISIANA		100% Surface		75% Surface		50% Surface		25% Surface	
		Total	Producer	Total	Producer	Total	Producer	Total	Producer
	Diesel	6.1	2.0	8.1	2.7	12.2	4.0	24.4	8.0
Electric	7.5	2.5	10.0	3.3	15.0	4.9	30.0	9.8	

1. Producer cost is a portion of total cost and in the Mississippi Delta averaged 23%.
2. Annual irrigation requirements based on an acre rotation of 40% rice, 40% soybeans, and 20% fallow. Base irrigation amounts published by Massey et al., 2017, Long-term measurements of agronomic crop irrigation made in the Mississippi delta portion of the lower Mississippi River Valley. Irrigation Science 35:297-313.
3. Producer cost is a portion of total cost and in Southwest Louisiana averaged 33%.
4. Annual irrigation requirements based on an acre rotation of 40% rice, 20% crawfish aquaculture, and 40% fallow. Base irrigation amounts published by Baisakh et al., 2019, Developing rice varieties suitable for alternative irrigation regimes in Louisiana, LSU AgCenter Winter Research Bulletin. W.R. McClain and R.P. Romaine, 2007, Louisiana Crawfish Production Manual, LSU AgCenter Publication #2637.
5. Diesel pumping plant costs based on farm gate fuel price of \$2.50 gallon.
6. Electric pumping plant costs based on power charge of \$0.13 per kilowatt hour.

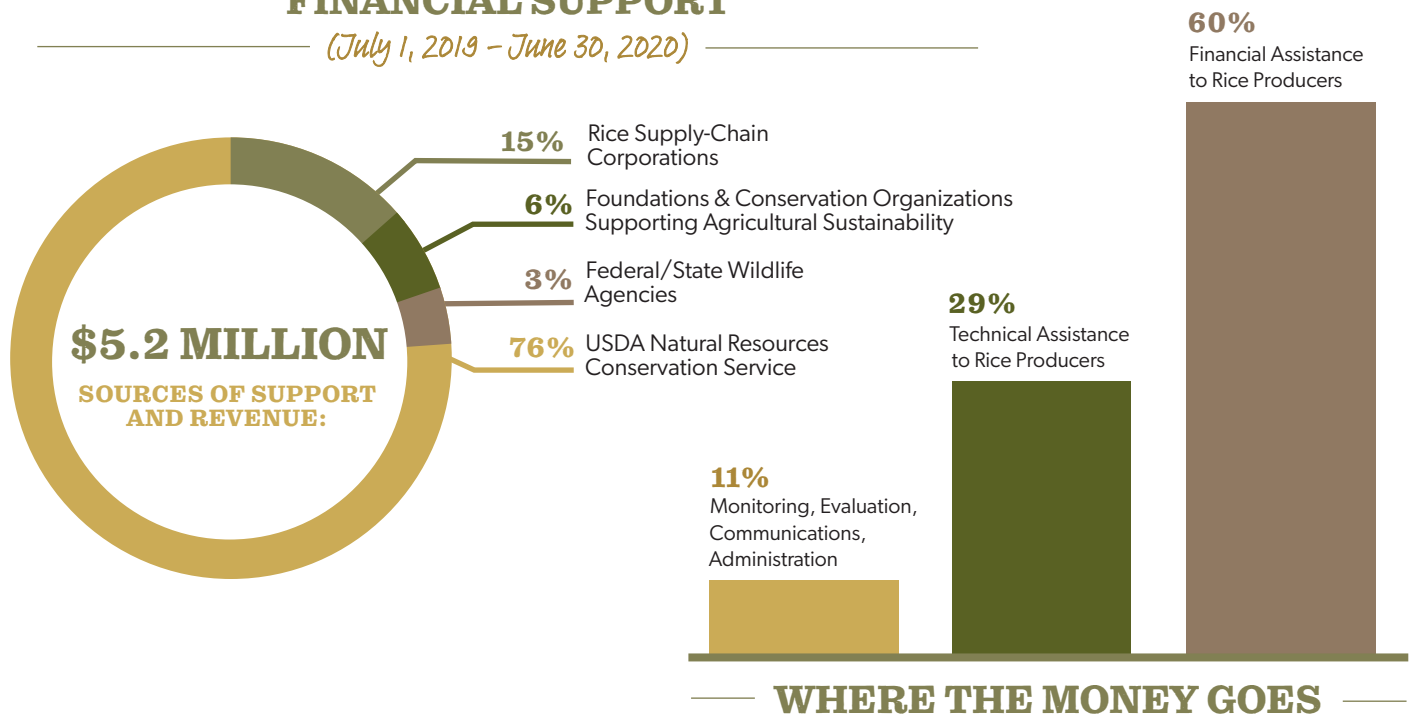
Financials 2020 - 2021

RICE ACRES IMPACTED



FINANCIAL SUPPORT

(July 1, 2019 – June 30, 2020)



Financial reporting does not include in-kind contributions of time and talent.

THANK YOU TO OUR LEADING FINANCIAL SUPPORTERS



In-Kind Supporters

We sincerely appreciate the time and talent offered by so many in-kind supporters, without whom, Rice Stewardship could not be such a success.

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Louisiana Rice Growers Assn.
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The Climate Trust
The Landscape Flux Group
The Rice Foundation
Unilever
USA Rice Council
USA Farmers
USA Rice Merchants' Assn.
USA Rice Millers' Assn.
Wharton County SWCD
White River Irrigation District
Yellow Rails and Rice Festival

“We thank the NRCS, our supply chain financial sponsors, and many other in-kind supporters, for the progress made to date. Let us continue the momentum, the economic and environmental impact, through tomorrow and beyond. And let us all remember what is good for rice is good for ducks!”

- Jeff Durand, Producer and Co-Chairman , Rice Stewardship



PHOTO: CALRICE.ORG



Thank You...
**for your support and
dedication to conserving our
Nation's working ricelands,
water, and wetland wildlife.**

PHOTO: CALRICE.ORG



FOR MORE INFORMATION PLEASE CONTACT:

DUCKS UNLIMITED
Scott Manley
smanley@ducks.org
601.956.1936

USA RICE
Josh Hankins
jhankins@usarice.com
501.398.6678

WWW.DUCKS.ORG/RICESTEWARDSHIP | WWW.USARICE.COM



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