

A photograph of a man in a plaid shirt carrying a young child on his shoulders. They are standing in a lush green rice field under a bright blue sky with scattered white clouds. The man is looking out over the horizon.

**RICE STEWARDSHIP**  
*2019 Annual Report*

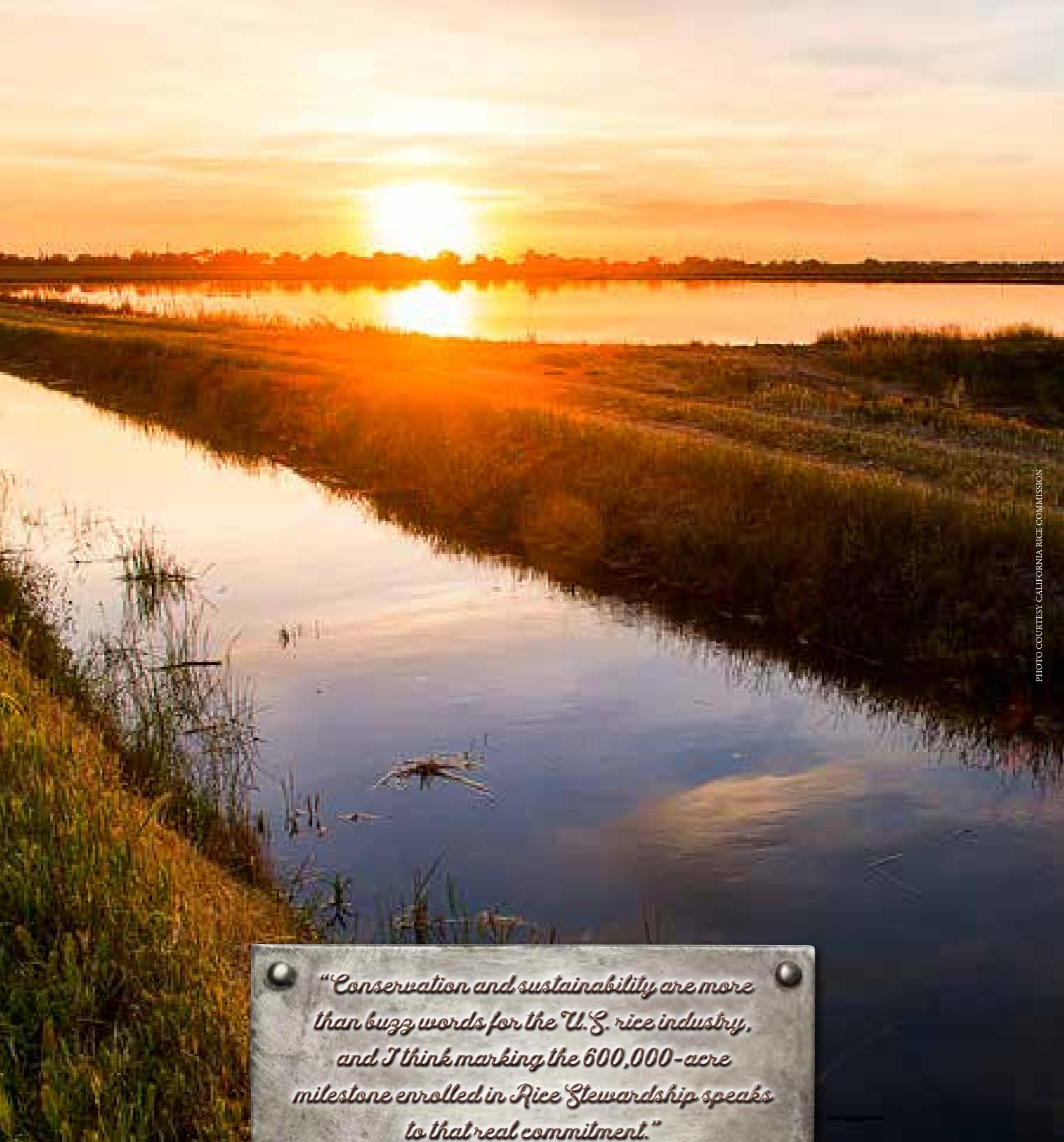


PHOTO COURTESY CALIFORNIA RICE COMMISSION

*"Conservation and sustainability are more than buzz words for the U.S. rice industry, and I think marking the 600,000-acre milestone enrolled in Rice Stewardship speaks to that real commitment."*

**- USA RICE DIRECTOR OF GROWER RELATIONS AND RICE STEWARDSHIP PARTNERSHIP, JOSH HANKINS**

## A MESSAGE FROM OUR LEADERSHIP

**A**t the close of this year, the USA Rice-Ducks Unlimited Rice Stewardship Partnership will reach an impressive milestone – 600,000 acres of conservation impact. Without the continued dedication of participating rice producers, such an achievement would not be possible. Similarly, the USDA Natural Resources Conservation Service (NRCS) and financial supporters of the partnership have enabled us to come this far and will enable us to continue this important endeavor for working rice lands, water, and wildlife.

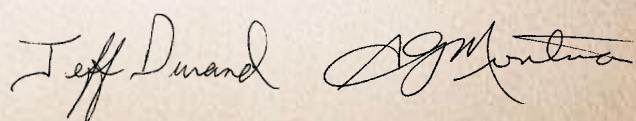
Rice Stewardship is making great strides in helping rice growers across the country steward the natural resources on their farms while producing food for the world. We continue to work with beginning farmers and new generations of family farmers to sustain the investments of those that came before them. We repeatedly prove that wildlife habitat and agriculture can and do coexist. In fact, waterfowl and rice agriculture benefit each other.

This partnership has collectively been awarded eight Regional Conservation Partnership Program (RCPP) projects across all six rice-growing states. Project leads are diverse, including California Rice Commission, Ducks Unlimited, Lower Colorado River Authority, and USA Rice. These eight RCPP awards provide more than \$80 million in financial assistance for conserving water and wildlife in rice lands. Working with partners, Rice Stewardship will seek three more RCPP projects in the next round. In addition, the California Rice Commission, Ducks Unlimited, and Point Blue Conservation

Science recently submitted a \$1.5 million proposal to the NRCS Conservation Innovation Grant program with the goal of enhancing 10,000 acres of rice ground for waterbirds by 2022.

Our combined publicity and policy efforts have secured sound conservation programs and funding in major legislation like the Farm Bill, including some important and positive changes to RCPP. First, RCPP is now a stand-alone program with its own funding and producer contracts through two funding pools – State/Multistate and Critical Conservation Areas (CCAs). All rice growing regions are covered under the Mississippi River Basin or California Bay/Delta CCAs. The first call for new project proposals was released in September 2019 with \$300 million available across all options. In addition, there is now a project renewal option. Highly-successful, ongoing projects like ours can request additional funding with NRCS State Conservationist support.

There is no limit to what we can accomplish by bringing together the agricultural industry, individual growers, conservation organizations, federal and state agencies, and corporations. We are all driven to use resources wisely, provide for people and wildlife, and leave this planet better for the generations who follow. Thank you for joining us in this effort.



*Jeff Durand & Al Montna  
Rice Stewardship Co-Chairmen*

# REGIONAL CONSERVATION PARTNERSHIP PROGRAM

## *The New Farm Bill and Regional Conservation Partnership Program 2.0*

By Ducks Unlimited Director of Conservation Programs, Dr. Scott Manley

Formerly known as the Agricultural Improvement Act of 2018, the latest Farm Bill brought forth the next generation of the Regional Conservation Partnership Program (RCPP), providing new and exciting opportunities for the Rice Stewardship Partnership.

Importantly, core principals have not changed. RCPP still offers a foundation for USDA's Natural Resources Conservation Service (NRCS), conservation partners, and rice producers to work together to harness innovation, expand the conservation mission, and demonstrate the value and efficacy of voluntary private lands conservation. Rice Stewardship is built upon this foundation and a mission to conserve working ricelands, water, and wildlife. We applaud the NRCS for their steadfast vision, providing a conservation platform upon which to build and continue this program in the 2018 Farm Bill.

Under RCPP 2.0 there are several advances important to Rice Stewardship. First, RCPP is now as a stand-alone program with its own funding and producer contracts. That means RCPP will no longer sweep funds from parent programs like the Environmental Quality Incentives Program (EQIP) and Conservation

Stewardship Program (CSP), but rather have its own dedicated funding. New RCPP projects will receive financial awards through one of two funding pools – State/Multistate and Critical Conservation Areas (CCAs). All rice growing regions are covered under the Mississippi River Basin or California Bay/Delta CCAs. Another key advancement is a project renewal option where highly-successful, ongoing projects can request additional funding with NRCS State Conservationist support. In September 2019 the first call for new project proposals and renewals was released with \$300 million available across all options.

Under the initial 2014 RCPP, eight individual projects were led by diverse partners, including the California Rice Commission, Ducks Unlimited, the Lower Colorado River Authority, and USA Rice. Together we have established a tremendous base for rice producers to increase conservation on their farms and a venue for collaboration, innovation, and expansion of private lands conservation. With the launch of RCPP 2.0, Rice Stewardship looks forward to continuing our close working relationship with the NRCS and rice growers to take full advantage of all the new and exciting opportunities in the coming years.

### *RCPP Project Dashboard*

#### 2015 NATIONAL RICE STEWARDSHIP PARTNERSHIP – COMPLETE

#### 2015 EXPANSION OF WATERBIRD HABITAT ENHANCEMENT PROGRAM IN CALIFORNIA – COMPLETE

#### 2015 CONSERVATION IN MICRO-WATERSHEDS OF SOUTHWEST LOUISIANA – COMPLETE

#### 2016 SOUTHWEST LOUISIANA NUTRIENT MANAGEMENT CONSERVATION PRACTICE 590 – RENEWAL

#### 2017 LOWER COLORADO RIVER AUTHORITY (LCRA) PRAIRIE CONSERVATION RESERVOIR – IN PROGRESS

#### 2017 MID-SOUTH GRADUATED WATER STEWARDSHIP – IN PROGRESS

#### 2018 GULF COAST WATER AND WILDLIFE – IN PROGRESS

#### 2018 NE LOUISIANA CULTIVATING WATER CONSERVATION – IN PROGRESS



United States  
Department of  
Agriculture

Natural Resources Conservation Service

## RECOGNITION FOR RICE STEWARDSHIP

### Rice Farmers Featured by Field to Market

Each month Field to Market features Farmer Spotlights with a press release and media push to bring broad attention to the individual efforts of each winner. These Farmer Spotlights focus on innovative farmers engaging in continuous operational improvements. Two of the six 2019 Spotlights are U.S. rice farmers. Congratulations to Timothy Gertson of Lisse, Texas, and Charlie Fontenot of Palmetto, Louisiana.



Charlie Fontenot (center)

### Partnership Award from Texas A&M AgriLife Extension



Rice Stewardship staff members Dennis Neuman (center) and Taylor Abshier (right of center) accept award.

Conservation Reservoir Project, a new reservoir in Colorado County. The project will increase water reliability and improve agricultural water-use efficiency within the Lakeside Irrigation Division while providing more flexibility to support downstream demands and enhancing waterfowl habitat.

### Collaboration of the Year

Rice Stewardship was selected as Field to Market's 2019 Collaboration of the Year. This award recognizes outstanding cross-sector partnerships in advancing continuous improvement in sustainable agriculture at the field and landscape level. It is one of three Field to Market Sustainability Leadership Awards. The winners of Farmer of the Year, Trusted Advisor of the Year, and Collaboration of the Year are all selected by Field to Market's Board of Directors and the Alliance's Awards and Recognition Committee. Each recipient demonstrates leadership in the pursuit of continuous improvement, resulting in measurable results and significant impact on both agriculture and the environment.



# *Changes to Arkansas Tax Credit for Water Saving Practices*

By USA Rice Director of Grower Relations and  
Rice Stewardship Partnership, Josh Hankins

In Arkansas, we have a great example of how the Rice Stewardship Partnership is working towards state-level policies for our rice producers. The Arkansas Natural Resources Commission is responsible for establishing policy for conservation, water rights, and resource planning. They also oversee a state tax credit available to farmers and landowners who precision level fields for more efficient water utilization, build on-farm water storage (reservoirs), and invest in on-farm improvements to convert groundwater to surface water.

Though available for some time and funded at \$10 million annually, the tax credit has been dramatically underutilized. Nearly 90% of the available funding is left on the table each year. There are two primary reasons for the lack of participation. First, many producers are simply not aware of this program. Second, some growers who could utilize the credits don't have the positive net income and tax liability required. Fortunately, recent changes supported by Rice Stewardship should increase this utilization.

"A change was made during the recent legislative session that allows farmers and landowners to turn

the credits into cash by transferring the credits to third parties who do have state tax liabilities," said Kevin McGilton, vice president of government affairs for Riceland Foods, one of the companies advocating for the policy change. "So, even if a producer cannot directly utilize the tax credit, they now have the option to sell it and still receive a financial benefit."

Andrew Grobmyer, executive vice president of the Ag Council of Arkansas, another group that helped push the new policy, explained, "Allowing the water conservation and development credits to be transferred is a significant and important evolution in this tough farm economy, and we applaud the General Assembly and Governor for supporting this effort."

Growers who are considering implementing the three practices mentioned above now have greater flexibility to take advantage of these state tax credits. These credits have the possibility of making a large financial impact on the producer's bottom line. None of this would have been possible without state agriculture organizations working diligently with government officials to get this transfer option passed through the legislature.



## PRODUCER PROFILE

*Central Valley*

*Mike Felkins,  
Richvale, California*

**M**ike Felkins began farming thirty years ago. Today, between farming and managing other farms, he oversees around 4,200 acres in the Sacramento Valley. He began waterfowl hunting 15 years prior at the age of 12, and the two passions quickly became linked.

"If you watch where waterfowl go, you can see for yourself that rice farmers, duck hunters, and conservation efforts like Rice Stewardship are all tied together," he explained. "Here in California, we work together to provide phenomenal winter habitat for waterfowl in the state."

Mike was glad to see the natural partnership between rice and ducks formalized, and joining the Rice Stewardship Partnership opened up more resources for him to implement conservation practices on his farm.

"I can see the difference in the amount of all kinds of birds using the fields after implementing Rice Stewardship habitat practices," Mike said.

As important to farmers like Mike as on-the-ground conservation practices is unified support from conservation and commodity groups on policies that impact farming.



"We are all together on this," he said. "If groups like Ducks Unlimited weren't involved in conservation on agricultural lands, it would make it that much more difficult for the rice industry. We are proactive together in all aspects of farming from on-the-ground conservation all the way to Farm Bills."

In California, rice farmers have accomplished a lot when it comes to providing habitat and having assets to offer wildlife. Conservation has always been a big deal to Mike, and, as a waterfowler, helping keep the duck population healthy is important to him.

"In today's world conservation has become an even bigger issue than it was in the past. We need to keep things diversified and keep many different species happy in this working land environment," he said. "Rice Stewardship has been a win for wildlife habitat and a win for us financially."

# RICE AND DUCKS IN D.C.

By Ducks Unlimited Manager  
of Agriculture Policy,  
Andrew Schmidt and  
USA Rice Vice President for Policy,  
Ben Mosely



Since its formation in 2013, the work of the Rice Stewardship Partnership has been inextricably linked to the Farm Bill. With the 2014 Farm Bill expiring last year, USA Rice and Ducks Unlimited staff and volunteers in Washington, D.C. and across the country worked tirelessly to reauthorize the bill and the voluntary, incentive-based conservation programs that have been an integral part of the Partnership's success. Those efforts paid off when the 2018 Farm Bill, formally the Agriculture Improvement Act of 2018, was enacted into law in December with broad, bipartisan support.

One of the biggest issues facing conservation leading up to this Farm Bill was funding. After conservation funding took a significant hit in 2014, it was critical that conservation programs not be further impacted by budget cuts. By maintaining robust funding for the conservation title of the bill, Congress ensured that the good work being done on the ground by farmers and landowners would not be hampered by further cuts.

The bill also increased annual baseline funding for the Regional Conservation Partnership Program (RCPP) to \$300 million.

Additionally, the 2018 Farm Bill included several program changes that will open more conservation opportunities for rice farmers. These changes include clarifying that wildlife contracts under the Environmental Quality Incentives Program (EQIP) can be up to 10 years and can include practices that incentivize post-harvest flooding. This change provides greater flexibility within RCPP for partners and producers to implement projects and gives successful RCPP projects like those under the Rice Stewardship Partnership the opportunity for renewal and expansion.

The success of the Partnership continues to be front and center in Washington, D.C. as part of both USA Rice's and DU's activities. In February, leaders from both organizations again came together to host our annual Ducks Love Rice lunch on Capitol Hill,



Partnership members and Senator Vitter

welcoming Congressional members and staff, along with NRCS partners, to visit with our team, enjoy some great rice recipes, discuss the impressive work of the Partnership, and celebrate the recent Farm Bill.

In May, USA Rice released the U.S. Rice Industry Sustainability Report, highlighting, among other things, the great work being done by rice farmers for waterfowl and other wetland-dependent wildlife. Finally, Ducks Unlimited and Nestlé Purina PetCare, another Rice Stewardship supporter, again co-sponsored a tailgate for Congressional staff and other partners before the annual Congressional Baseball Game in June. This gave us another opportunity to show the valuable benefits of working together.

As implementation of the 2018 Farm Bill moves forward, USA Rice and DU will work with our partners at USDA and in the agriculture and conservation communities to ensure that program rules are crafted in a way that enables the Rice Stewardship Partnership to continue and expand in the future.



Congressman LaMalfa (R-CA-1), Nicole Van Vleck and Al Montna.





## PRODUCER PROFILE

Gulf Coast

*Timothy Gertson,  
Lissie, Texas*

Timothy Gertson, a 5th generation rice farmer from Lissie, Texas, owns and operates G5 Farms with his cousin Daniel. They farm more than 2,000 acres of rice, with rotations of corn, sorghum, soybeans, and wheat. They began farming independently of their fathers 10 years ago, and Tim secured his first NRCS Environmental Quality Incentives Program (EQIP) contract just one year later. Over the last 9 years, they have secured several more.

With this support, Tim has land leveled and installed permanent irrigation control structures on 600 acres and will do the same on another 608 acres in the coming years. Tim reports these improvements have already reduced their water usage by 40%. Tim has also implemented nutrient management practices on their farm, which has allowed them to address the water and air quality impact resource concerns.

Tim credits the rice industry's unique relationship with waterfowl as one of the reasons rice farmers are some of the best stewards of the environment.

"I really think the USA Rice-Ducks Unlimited Rice Stewardship Partnership could be used as the model for commodity and wildlife groups working together going forward," Tim explained.

As a testament to their stewardship success, after only 3 years on their own, Tim and Daniel



received the 2012 Farmer of the Year award from the Coastal Bend Soil and Water Conservation District for implementing advanced conservation practices on their farm. It is important to them to ensure future generations have the resources and opportunities to carry on farming traditions.

"My boys want to be farmers just like dad and someday farm the same land our family has been working for the last 108 years. Without being able to make a living for my family and maintain the natural resources to keep my land in production, there wouldn't be anything left to hand to the 6th generation," Tim said.

Tim does not shy from sharing his conservation story with others and providing them with the opportunity to learn from his experiences. He is very involved in his local Farm Bureau and in 2015 won the Texas Farm Bureau Outstanding Young Farmer and Rancher Award. Timothy also serves on several boards, including the Texas Rice Producers Legislative Group and the USA Rice Sustainability Committee.



## *Walmart Foundation Supports Groundwater Conservation*

By Walmart Foundation Senior Manager – Sustainable Supply Chains, Leonardo Pradela

**W**ith our second \$1-million grant for Rice Stewardship the Walmart Foundation is making sure more farmers in the Mississippi Alluvial Valley can reduce groundwater use. The Foundation's most recent grant complements \$6.5 million from the NRCS to support surface water irrigation through the Rice Stewardship Partnership in 2019.

"We are thrilled to have continued support from the Walmart Foundation for natural resource conservation on agricultural lands in the Mississippi Alluvial Valley," said DU Director of Conservation Programs Dr. Scott Manley. "Working lands are vital for waterfowl and other wildlife, and farmers are good stewards of the soil, water, and other natural resources. Helping them improve on-farm operations is critical for conservation success."

The focus of this grant is groundwater conservation on agricultural lands in Arkansas, Mississippi, and Louisiana. With nearly 10 million acres of irrigated cropland in the Mississippi Alluvial Valley, irrigation withdrawals in many areas exceed recharge rates. There is growing concern across the region about falling groundwater levels. To address this concern and help farmers grow sustainable crops, Rice Stewardship staff are working with farmers, the NRCS and other partners to convert farms to surface-water

irrigation. Using surface water reduces groundwater use and, in many cases, improves water quality after on-farm use.

The Walmart Foundation is excited to provide support for Rice Stewardship efforts to improve water conservation and nutrient management practices in agriculture. This initiative will help to support farmers as they test and advance practical approaches to efficient water management, with plans to scale what works over time.

DU staff will serve as the boots-on-the-ground to provide professional advice to interested landowners. The program began in Louisiana and Mississippi this year with plans to extend to Arkansas in 2020.

Walmart Foundation funding will also be used to support a research study by the University of Arkansas-Monticello examining persistence of conservation practices after NRCS conservation contracts expire. Interviews with farmers who received financial assistance through an initial Regional Conservation Partnership Program will help the researchers understand which conservation practices are continued beyond the life of the actual conservation contract. This information will be used to better design future conservation programs and improve uptake of conservation practices.



# A MESSAGE FROM MISSISSIPPI'S NRCS

By MS NRCS State Conservationist, Kurt Readus

The future of the Mississippi Delta's economic and environmental viability depends on abundant and accessible water. More than 19,000 permitted irrigation wells in the shallow Mississippi River Alluvial Aquifer are used for crop irrigation, aquaculture, and wildlife management. Over time, demands for water have grown to exceed supply.

Recognizing these challenges, Governor Phil Bryant issued an Executive Order in 2014 formalizing the Delta Sustainable Water Resources Task Force. The Task Force is charged with protecting the viability of the Delta's aquifer and instream flows and includes the Yazoo Mississippi Delta Joint Water Management District, Delta Council, Delta FARM, Mississippi Farm Bureau, US Army Corps of Engineers, US Geological Survey, USDA NRCS, Mississippi Soil and Water Conservation Commission, and Mississippi Department of Environmental Quality. The call to action has been extraordinary, and we have progressive programs in place to make a difference.

- **MISSISSIPPI WATER CONSERVATION MANAGEMENT PROGRAM (MSWCMP)** – In coordination with Task Force efforts, we launched the MSWCMP in 2014 to address water quantity concerns. Since then, over \$20 million in financial assistance has been deployed to Delta agricultural producers to impact approximately 500,000 acres, 20% of our Delta's irrigated land base. Top conservation practices include irrigation water management (ex: Pipe Planner, moisture sensors), flowmeters, pump automation, surge valves, and sprinkler systems.
- **THE REGIONAL CONSERVATION PARTNERSHIP PROGRAM (RCPP)** – The Rice Stewardship Partnership has worked closely with us to deliver two RCPP projects in the Delta; providing \$5 million in financial assistance and impacting 47,750 acres. Capturing the true intent and spirit of RCPP, a supply chain partnership was built, staff capacity was added, and NRCS programs were implemented to conserve our water resources.
- **MISSISSIPPI SURFACE WATER MANAGEMENT PROGRAM** – 2019 marked the expansion of an additional strategy for reducing groundwater use – making more effective use of available surface waters for irrigation. Rivers, bayous, lakes, drainage canals, and tailwater and storage reservoirs can provide ample irrigation water. Using available surface water offers significant relief for groundwater resources. Coupled with efficiencies, this is the solution for the Delta's groundwater stress. With extra technical assistance provided by Rice Stewardship staff, \$5 million in financial assistance was invested in 65 surface water irrigation projects covering 13,000 acres.

We are dedicated to the Delta's agricultural producers and landowners, to addressing critical resource concerns, and to conservation partnerships. The actions detailed above are a testament to that dedication, and we look forward to more progress with our conservation partners in years to come.



United States  
Department of  
Agriculture

Natural Resources Conservation Service



# Chevron

## Chevron Fueling Rice Stewardship's Growth

By Ducks Unlimited Director of Development, Bob Dew

In September 2013 Chevron was recognized for their support in conservation at a Ducks Unlimited Banquet in Lafayette, Louisiana. Today, Chevron is a Platinum Legacy Sponsor. With their backing, USA Rice and Ducks Unlimited are working to preserve the essential relationship between Louisiana's rice farmers and migrating waterfowl.

"Chevron congratulates all members of the Rice Stewardship Partnership for their accomplishments over the last seven years," said Mark Hatfield, Vice President of Chevron's Gulf of Mexico Business Unit. "What started out as a local collaboration among Louisiana rice producers has now grown to include conservation partnerships in California, Texas, Arkansas, Missouri, and Mississippi. Chevron values its partnership with Rice Stewardship and believes that meeting the conservation needs of the land, water, and wildlife are certainly compatible with meeting the food and energy needs of tomorrow."

Chevron's funding has enabled Rice Stewardship to positively impact Louisiana's \$312-million/year rice

industry. With the rice industry playing such a vital role in supporting North America's waterfowl, we agree that "what's good for rice is good for ducks."

Working through the Rice Stewardship Partnership, Chevron has provided tremendous benefits to producers and natural resources. One of the fundamental components of Louisiana's Rice Stewardship efforts is our pipe drop program. Chevron's generosity in support of this initiative has allowed us to fund projects that address water quality through the installation and use of these grade stabilization structures on 75 farms. These structures reduce erosion, increase water management capabilities, and decrease maintenance. In addition to aiding in rice production, these 75 projects will provide more than 10,000 acres of waterfowl habitat in the months and years to come. Through their continued contributions, Chevron is working to inspire the next generation to protect and conserve Louisiana's working ricelands, water, and wildlife.

*"What started out as a local collaboration among Louisiana rice producers has now grown to include conservation partnerships in California, Texas, Arkansas, Missouri, and Mississippi."*

- MARK HATFIELD, CHEVRON VICE PRESIDENT



Entergy®

## Entergy Empowers Rice Stewardship

By Entergy Director of Environmental Policy, Kelli Dowell

As the largest electric power production and retail distribution company across the rice-growing regions of the Mississippi Alluvial Valley and Gulf Coast region, Entergy Corporation is a natural partner for Rice Stewardship and improving farm production and efficiency. Though our engagement goes back several years, we recently invested more in this important endeavor by committing \$250,000 to Ducks Unlimited in support of Rice Stewardship initiatives. The grant was awarded through Entergy's Environmental Initiatives Fund, which recently awarded \$1 million to 18 organizations focused on improving the environment through innovation, restoration, and protection.

Entergy offers an array of technical and financial assistance to rice producers within our four-state service territory of Arkansas, Louisiana, Mississippi, and Texas to improve on-farm efficiencies and environmental performance. Programs include electric line extensions to serve new irrigation wells, line extensions for diesel-to-electric pump conversions, automation of electric irrigation wells and special rate packages to help Entergy manage peak demand loads in summer. Although details of each program differ

by state, this assistance adds sustainable value for rice producers and Rice Stewardship.

"Entergy has been a great partner since 2016," said DU Director of Conservation Programs Dr. Scott Manley. "Our field staff line up perfectly across the landscape, and cross-training has allowed us to serve rice producers in a coordinated fashion. And with our ability to use the financial assistance related to Entergy's on-farm efficiency programs as matching contributions in RCPP proposals, Entergy is a perfect collaborator for Rice Stewardship."

Entergy employees and customers depend on the same water, land, and food resources that Rice Stewardship is working to sustain and improve, and rice growers are our customers. With so many overlapping resource concerns and constituents, the synergy between Rice Stewardship and Entergy is helping sustain critical resources for the benefit of all our stakeholders. The partnership also influences United Nations Sustainable Development Goal #15, Life on Land; #12, Responsible Consumption; and #17, Partnerships for the Goals, among others.





## PRODUCER PROFILE

Mississippi Alluvial Valley

### *Brandon Stevens, Hickory Ridge, Arkansas*

**B**randon Stevens, a 6th generation farmer, has been a part of the agriculture community for over 30 years along with his 5th generation farmer wife, Laura. His early years were spent assisting his grandfather, Norman Halk, with the family farm. Today, he is showing his 12-year-old son how to farm in hopes he and his brother will continue the family legacy for years to come.

Brandon specialized in rice agronomy and was a consultant for over 5 years before also taking on farming in 2010. As he says, "I'm a rice guy." He continued doing both for 5 more years before switching completely to farming.

Brandon is first and foremost a rice producer, though he also grows soybeans, corn, and wheat. He is farming 2,200 acres this year and is always on the lookout for new, innovative ways to improve his bottom line and the sustainability of his farms.

"I'm always looking for ways to be more efficient so I can pass this farm down to my two kids," he said.

Brandon's steadfast support for agricultural sustainability is matched by his passion for waterfowl and wetlands conservation, making his participation in Rice Stewardship a natural fit.

"I'm a hunter, and my kids like to hunt," he explained. "I'm out here on the farm, I have this ground I can flood, and I have all this food



available for the ducks. Why wouldn't I do my part to manage it for the benefit of waterfowl and my own land? That way, those ducks are there for us to enjoy, and maybe 40 or 50 years from now my sons' children will be able to duck hunt this same area."

Seeing water availability as the greatest challenge for the future of rice farming in Arkansas, Brandon has incorporated many water conservation methods on his farm. Pipe Planner has helped him increase water use efficiency, and using an automated pump system in combination with in-field moisture sensors adds to that.

"Rice Stewardship has helped me install tailwater recovery ditches and helped me implement alternate wetting and drying, both of which provide water savings and input cost benefits," he said. "The partnership has given me tools and incentives to learn some new practices that I wasn't always doing. I think the reward is better yields, money saved, and sustainability for the future. So far, I've seen a significant decrease in my energy bill, which is an indicator that my water usage has decreased a lot."



**CORTEVA**<sup>TM</sup>  
agriscience

## *Forging Partnerships to Create a Sustainable Impact*

By Corteva Chief Sustainability Officer, Dana Boulden

**W**hen we rang the bell on the New York Stock Exchange last June as Corteva Agriscience – a new, global, pure-play ag company – we made a commitment to help farmers thrive while conserving resources and sustaining the land. Our singular focus on agriculture means we now share a common purpose with the industry as a whole: to enhance lives and the land. Even our name – Corteva – is derived from words that mean “heart” and “nature.”

We’re honored to follow our legacy predecessor Dow AgroSciences in supporting the USA Rice-Ducks Unlimited Rice Stewardship Partnership with financial support and technical expertise. We’re helping farmers sustain and protect their farms for the next generation. Through this program, they can conserve their land’s natural resources such as water, soil, and waterfowl habitat while creating long-term positive impacts on the environment and their bottom line.

As part of our partnership, we’re sharing our expertise in Integrated Pest Management (IPM) with the Rice Stewardship field team.

“IPM is one of the most sought-after suites of conservation practices by rice producers, and Corteva’s participation in Rice Stewardship helps us meet that demand,” said Ducks Unlimited Director of Conservation Programs, Dr. Scott Manley. “We have producer projects on hundreds of thousands of acres where various conservation measures, such as smart-spray technology, are being deployed to get the best performance from crop protection products while preserving the environment.”

We’re driving actions and innovations that improve lives and make the world a better place, and by forging partnerships like this one, we can make a greater impact, faster. Together, we’re strengthening the rice industry and ensuring that wetlands will continue to provide habitat for waterfowl and other wildlife for generations to come.





# Towards a Higher Water Quality for Arkansas Rice

By Arlene Adviento-Borbe, Michele Reba and Joe Massey,  
Delta Water Management Research Unit, USDA-ARS, Jonesboro, Arkansas

To continue assessment of the agronomic and environmental benefits of water and nutrient conservation practices in the Mid-South, a runoff water-quality field study was conducted at Arkansas farms located near the towns of McGehee (MG), Humnoke (HM), and Stuttgart (ST) in 2017. The main goal of this study was to provide baseline information on nutrient and sediment losses from conventional rice cropping systems in the region.

All fields were managed using conventional continuous flood practices. A total of 179 water samples were collected from early spring until harvest. Minimal amounts of N and P were measured in water samples collected from river inlets or tailwater recovery systems at ST and MG. Results indicated that nitrate nitrogen was the main form of nitrogen in surface runoff water from all farms and ranged from 0.02 to 1.59 mg N L<sup>-1</sup>. Mean ammonium-N and nitrite-N concentrations were less than 1.2

mg N L<sup>-1</sup>. Approximately 85% of waters sampled had nitrate-nitrogen levels less than 1.0 mg N L<sup>-1</sup>. Ammonium-N values were less than 1 mg L<sup>-1</sup> in this study. These values are low, and there appeared to be no large effect of season or straw management on floodwater concentrations as all were less than 1 mg ammonium-N L<sup>-1</sup>. Nitrate-N was more variable, and the greatest average concentrations at the HM locations occurred at the end of the rice growing season as several fields must be drained through one another. In contrast, the greatest mean nitrate-N concentrations at ST occurred at the beginning of planting. But again, overall averages are low.

The highest P concentrations at all farms were measured during the early part of growing season, planting fertilizer application. The majority of water samples had P values less than 0.03 mg P L<sup>-1</sup> and were below the U.S. EPA regional background levels for rivers (0.128 mg L<sup>-1</sup>). However, even these very low concentrations can accelerate eutrophication in more sensitive lakes and freshwater impoundments.

There were large fluctuations of suspended sediment concentrations during early growing season and at times associated with heavy rain (see graph). However, even the greatest runoff concentrations were below those in adjacent rivers and streams.

Overall, our findings suggest that current rice management practices at the three Arkansas farm locations contributed only minimally in terms of nitrate-nitrogen losses during runoff. While P levels in runoff were lower than EPA guidelines for rivers, some samples did exceed the lower P standard for sensitive lakes and freshwater impoundments. Sediment losses from rice fields were generally low and were highest during the early season when canopy coverage was low and/or during intense rainfall events. This study highlights the utility in monitoring of water quality as it helps to ensure that conventional cultural practices avoid contributions to water contamination and provides baselines by which we can continuously improve nutrient management practices and optimal crop production going forward.

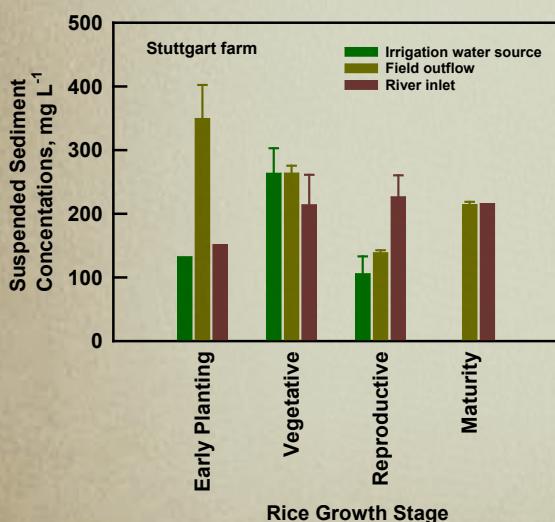


Figure 1. Seasonal mean and standard errors of suspended sediment concentrations in water samples from various locations in Stuttgart farm during 2017 growing season.

# CONSERVATION IMPACT REPORT

By Ducks Unlimited Director of Conservation Programs, Dr. Scott Manley

## *Reducing Greenhouse Gas Emissions and Saving Water Through Alternate Wetting and Drying*

Since program inception, Rice Stewardship producers have deployed the innovative Alternate Wetting and Drying (AWD) irrigation strategy – executing timely dry downs to break methane formation and capture summer rains – on more than 50,000 acres in Arkansas and Mississippi. Calculations based on peer-reviewed research showed this technique reduced greenhouse gas emissions by 39,415 metric tons of CO<sub>2</sub> equivalents and saved approximately 34,945 acre-feet of groundwater.

How do we put this into perspective? Using EPA calculators, this is the same as taking 8,370 cars from U.S. highways for one year and filling 17,200 Olympic-size swimming pools with irrigation groundwater.

### ALTERNATE WETTING AND DRYING (AWD) IRRIGATION STRATEGY

*Results in Arkansas and Mississippi*

REDUCED GREENHOUSE GAS EMISSIONS BY  
39,415 METRIC TONS OF CO<sub>2</sub>



EQUIVALENT TO REMOVING  
8,370 CARS FROM U.S. HIGHWAYS  
FOR A WHOLE YEAR

SAVED APPROXIMATELY 34,945 ACRE-FEET  
OF GROUNDWATER



EQUIVALENT TO FILLING  
17,200 OLYMPIC-SIZED SWIMMING POOLS  
WITH IRRIGATION GROUNDWATER

### *Soil Retention in Missouri*

Under the Mid-South RCPP, our producers in southeast Missouri once again held winter rainfall on what now totals 20,905 acres through winter 2018-2019. Approximately two-thirds of these acres were no-till while the remaining third was tilled after harvest. Based on research published in the Journal of Soil and Water Conservation, if these acres were traditionally tilled in fall and left to drain rainfall over winter, a total of 10,425 tons of soil would have been exported from fields. But with this increased level of no-till and holding winter rainfall, only an estimated 1,250 tons of soil were lost.

How do we put this into perspective? Calculations show participating rice producers reduced soil losses by 88% and prevented 600 dump trucks of soil from entering the waterways of southeast Missouri.

PARTICIPATING RICE PRODUCERS REDUCED  
SOIL LOSSES BY 88%



PREVENTED  
600 DUMP TRUCKS  
OF SOIL FROM  
ENTERING THE  
WATERWAYS OF  
SOUTHEAST MISSOURI



# CALIFORNIA RICE COMMISSION

## *Enhancing Stewardship in Sacramento Valley Rice Fields*

By California Rice Commission Environmental Affairs Manager, Paul Buttner

We at the California Rice Commission (CRC) are dedicated to maximizing our growers' ability to provide environmental benefits in their fields. Through a variety of initiatives, we have had success at the state and federal levels, plus several new and promising projects on the horizon.

*These programs include:*

**CALIFORNIA WINTER RICE HABITAT INCENTIVE PROGRAM** - Thanks to the dedication of Assembly Member Cecilia Aguiar-Curry and several of our wildlife conservation partners, CRC successfully got AB 2348 passed through the State Legislature, and it was signed into law by the Governor. This bill establishes a winter flooding habitat incentives program, with administration handled by the California Department of Fish and Wildlife. Initial funding of \$5 million was placed in the state budget to set the new habitat program in motion. The first year has been implemented and we are currently working with the Legislature on refining the program with a follow-up bill (AB 256).

**RICELANDS SALMON HABITAT PILOT PROJECT** - We are working with a coalition of scientists and project funders to help salmon in a meaningful way, just like our industry has done with birds. This \$1.4-million pilot project is testing and refining ricefield practices that could be implemented to help struggling salmon populations. Despite challenges from the wet winter and spring, we have completed year one of this effort and are currently designing our year-two science program.

**REGIONAL CONSERVATION PARTNERSHIP PROGRAM** - This \$7-million program began in 2015 and has supported many valuable rice shorebird habitat projects. Conservation contracts are winding down, and all of the program funding has now been completely obligated.

**BIRDRETURNS** - Our efforts with The Nature Conservancy continue to pay dividends. This is the program where growers submit bids for the opportunity to deliver waterbird habitat benefits on their farms. We are five years into this program, and it is very popular with many growers. The California Rice Commission will continue to foster partnerships and help growers maintain their legacy as "The Environmental Crop."

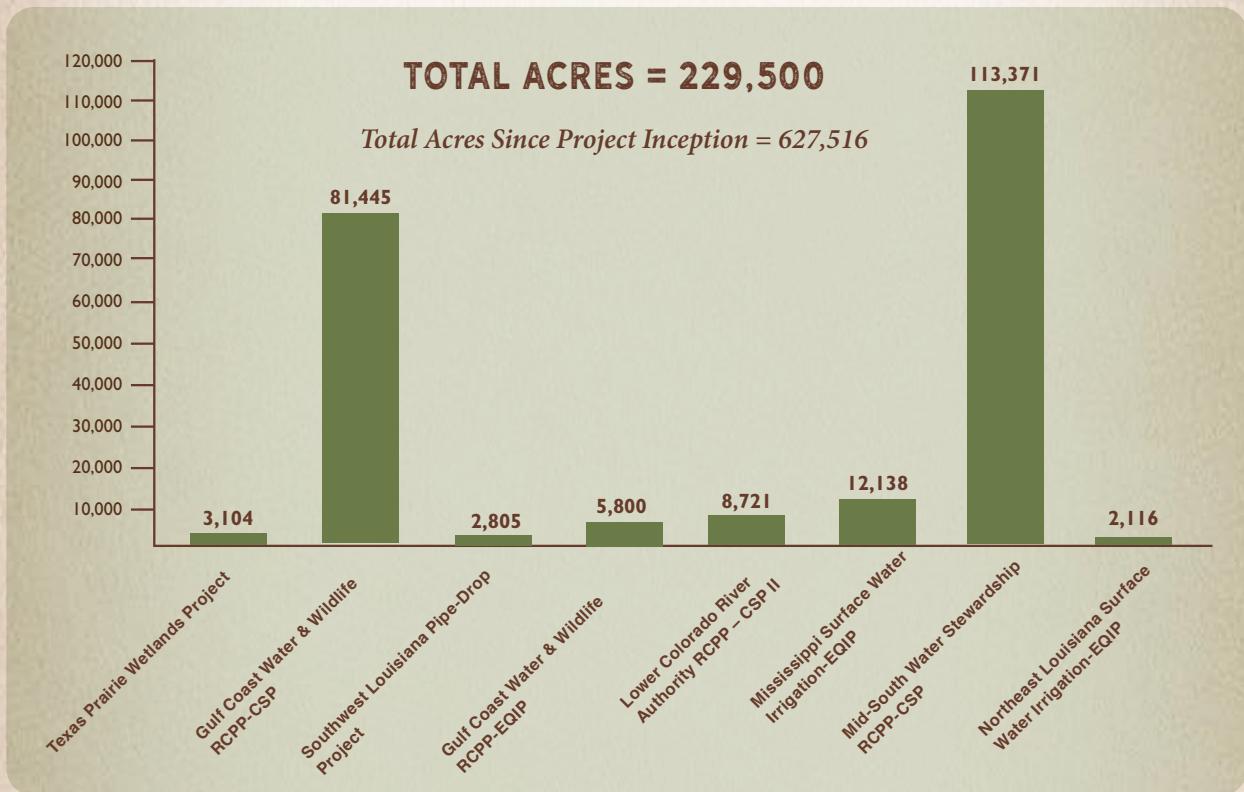


BRIAN BAER, CALIFORNIA RICE COMMISSION

# 2018-2019 Financials

## RICE ACRES IMPACTED

*July 1, 2018 - June 30, 2019*



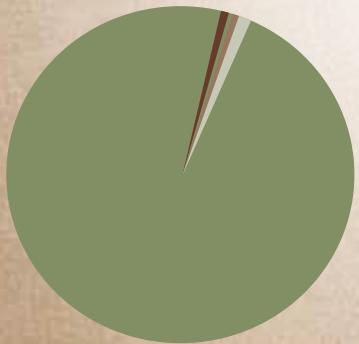
RCPP = Regional Conservation Partnership Program EQIP = Environmental Quality Incentive Program CSP = Conservation Stewardship Program

## FINANCIAL SUPPORT

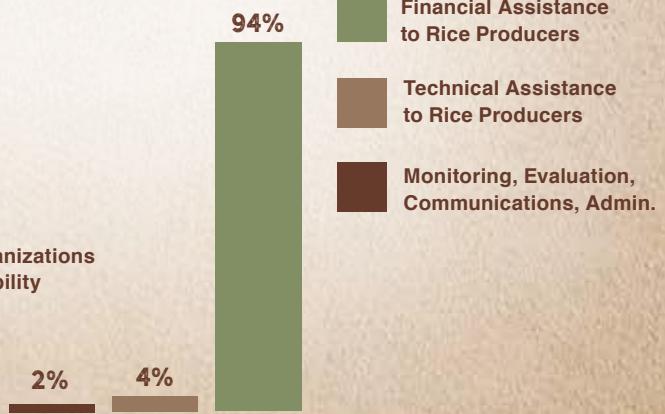
(July 1, 2017 – June 30, 2018)

**\$34 MILLION**

### SOURCES OF SUPPORT AND REVENUE:



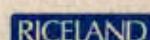
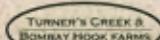
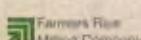
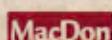
## WHERE THE MONEY GOES



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

## *Financial Supporters*

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.**

- Ag Council of Arkansas
- Agri-Drain Corporation
- American Carbon Registry-Winrock International
- Applied Geosolutions
- Arkansas Assn. Conservation Districts
- Arkansas Chapter-The Nature Conservancy
- Arkansas Farm Bureau
- Arkansas Natural Resources Commission
- Arkansas Rice Federation
- Arkansas Rice Research & Promotion Board
- Audubon Texas
- Bay City Chamber of Commerce and Agriculture
- Bunge North America
- California Rice Commission
- California Rice Research & Promotion Board
- Central Valley Joint Venture
- Chambers Liberty County Navigation
- City of Eagle Lake, TX
- Coastal Bend Groundwater Conservation District
- Colorado County SWCD
- Colorado County, TX
- Delta Council
- Delta F.A.R.M.
- Delta Wildlife
- Eagle Lake Chamber of Commerce
- Entergy
- Environmental Defense Fund
- Field to Market
- Garden Highway Mutual Water Company
- Gulf Coast Joint Venture
- Gulf Coast Water Authority
- Independent Cattleman's Assn.
- Kellogg's
- Louisiana Department of Agriculture and Forestry
- Louisiana Department of Environmental Quality
- Louisiana Department of Wildlife and Fisheries
- Louisiana Rice Growers Assn.
- Louisiana Rice Mill
- Louisiana Rice Research & Promotion Board
- Louisiana State University AgCenter
- Lower Colorado River Authority
- Lower Mississippi Valley Joint Venture
- Lower Neches Valley Authority
- Mars
- McCrometer
- Mississippi Rice Research & Promotion Board
- Missouri Department of Conservation
- Missouri Rice Producers Group
- National Black Growers Council
- National Watershed Coalition
- Northern California Water Assn.
- Syngenta
- Texas A&M AgriLife Extension Service
- Texas A&M Institute for Renewable Natural Resources
- Texas A&M Wintermann Rice Research Station
- Texas Parks & Wildlife Department
- Texas Rice Producers - CWIC
- Texas Rice Producers Legislative Group
- Texas State Soil & Water Conservation Board
- Texas Water Resources Institute
- The Climate Trust
- The Landscape Flux Group
- The Rice Foundation
- Unilever
- USA Rice Council
- USA Rice Farmers
- USA Rice Merchants' Assn.
- USA Rice Millers' Assn.
- Wharton County SWCD
- White River Irrigation District
- Yellow Rails and Rice Festival



*"Sustainability to me is when the next generation takes over with healthier soil and cleaner water, hopefully producing more food with less energy."*

- CHARLIE FONTENOT, LOUISIANA RICE FARMER



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