

- Rice Stewardship -
2017 ANNUAL REPORT



 <p>DUCKS UNLIMITED</p>	<p>USA Rice</p> 
<p>RICE STEWARDSHIP</p>	

Our CONTINUED, STRONG RELATIONSHIP WITH DUCKS UNLIMITED,
NRCS, AND OUR MANY OTHER CONTRIBUTING PARTNERS BRINGS
RECORD LEVELS OF CONSERVATION FUNDING TO RICE FARMERS.

- Betsy Ward, USA Rice President and CEO



A Message

FROM OUR LEADERSHIP

Since our initial annual report last year, the Rice Stewardship efforts have grown by leaps and bounds. Implementation of our several Regional Conservation Partnership Program (RCPP) agreements with the USDA Natural Resources Conservation Services (NRCS) has been rolled out in all six rice growing states. One producer in Arkansas flooded fields for the first time this winter, and they were full of waterfowl. This is the first time he'd ever had ducks on his place, but with his engagement in our efforts, it certainly won't be the last.

This important partnership continues to serve as a model of cooperation and communication between a farm group and a conservation organization. Policy makers and state and federal agency staff have all expressed appreciation and admiration for our collaboration and held us up as an illustration of what works. We will continue to lead by example.

Remaining true to the Partnership's original goals, we have focused on water and nutrient management, energy efficiency and wildlife habitat and have made significant progress on all fronts. In addition to implementation of our original *Sustaining the Future of Rice* national RCPP and other, more local RCPP agreements, we have worked with partners to secure new RCPP support for work in Arkansas, Louisiana, Texas, Missouri and Mississippi.

Along with the acres already a part of our RCPP through the Environmental Quality Incentive Program (EQIP), NRCS' re-invented Conservation Stewardship Program (CSP) will remain very important to Rice Stewardship on the national level. With all the various rice-related RCPP projects combined, Rice Stewardship CSP acres should top 320,000 acres by 2019. This represents 10 percent of the rice acres planted today! We remain dedicated to working with NRCS to understand, deliver, grow and ensure the success of CSP.

Private lands conservation is built on relationships among producers, landowners, NRCS, Soil and Water Conservation Districts, partners like USA Rice and DU, supply-chain corporations and others. We recognize fully the importance of establishing and maintaining working relationships with all the individuals and groups engaged in Rice Stewardship.

Relationships equal trust, and we will maintain and grow that trust as we pursue shared goals. With the upcoming Farm Bill legislation and demands for significant federal spending cuts, it is vital that we stand united and vocal for a mutually beneficial conservation title. Some of our priorities will not overlap, but many do, and we will continue working together to see those included in policies and programs.



Jeff Durand & Al Montna
Rice Stewardship Co-Chairmen

Regional Conservation Partnership Program

A FOUNDATION FOR RICE STEWARDSHIP



The Regional Conservation Partnership Program (RCPP) is a landmark initiative launched in the 2014 Farm Bill. This program offers expanded opportunities for USDA's 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 these same principals to conserve working ricelands, water and waterfowl. We applaud the NRCS for their vision and for providing a solid foundation upon which we can build.

Rice Stewardship leaders have collaborated to apply for and receive six RCPP projects to date. In 2015 three projects were secured: (1) National Rice Stewardship Partnership covering all six rice-growing states; (2) Expansion of waterbird habitat enhancement programs in California; and (3) Conservation in micro-watersheds of southwest Louisiana. These projects are past the halfway point of implementation with completion planned for the end of 2018.

Another RCPP project was awarded in 2016 for southwest Louisiana entitled Nutrient Management Conservation Practice 590. Through this project we are executing conservation contracts with producers who will adopt precision practices for soil testing and fertilizer application.

Two RCPP projects were secured in 2017, including one covering the Mississippi Alluvial Valley dubbed the Mid-South Water Stewardship and the Lower Colorado River Authority's (LCRA) Prairie Conservation Reservoir in Texas. These projects promise big returns for our water conservation priorities.

These six RCPP projects are led by diverse partners, including Ducks Unlimited, California Rice Commission, USA Rice and LCRA. Together they form a tremendous venue for collaboration, innovation and expansion of our conservation mission. Once again, we applaud the NRCS for their vision and for providing this solid foundation upon which to build. Rice Stewardship looks forward to upholding and continuing RCPP, indeed a landmark initiative, in the upcoming Farm Bill.



— RCPP Impact —



- The six RCPP projects procured to date will be fully implemented by 2021.
- Across these 6 years, over 500,000 acres of rice and rice-rotation lands will be positively impacted.
- Financial assistance to rice producers to implement conservation practices will exceed \$50 million.

Rice Stewardship sincerely appreciates the NRCS, without whom, conservation impact of this scale would not be possible.

Delta Plastics REDUCE AND RECYCLE

Delta Plastics is the leading manufacturer and supplier of irrigation polytube for the agriculture industry and a supporter of the Rice Stewardship Partnership.

“Delta Plastics is proud to partner with DU and USA Rice to help the Rice Stewardship Partnership deliver their on-the-ground efforts,” said Director of Irrigation Resources Matt Lindsey. “Our support of the Partnership is a direct result of the H2O Initiative, an effort in the lower Mississippi River Delta region to reduce water usage for irrigation.”

The H2O Initiative works with a network of technical experts and farmers toward a goal of reducing irrigation water use by 20 percent by 2020. A diverse list of stakeholders is committed to this goal, and reducing irrigation water for rice is essential to obtaining it. Delta Plastics facilitates reduced water usage with their products and free planning software, Pipe Planner.

Using Delta Plastics polytube in combination with Pipe Planner gives growers the ability to use Multi Inlet Rice Irrigation (MIRI) and Alternate Wetting and Drying (AWD). Switching from traditional, cascade irrigation to MIRI and AWD can offer multiple benefits. Both irrigate all rice paddies in a field simultaneously. This reduces the effects of

cold water rice in the upper field while at the same time preventing heat stress to the crop in the lower paddies. As producers reduce environmental stress to the crop, they also diminish impacts to their bottom line with decreased pumping costs. Find out more about conserving water and producing a more profitable rice crop at the new H2O Initiative website, h2oinitiative.com.

While Delta Plastics’ products reduce environmental impacts by advancing irrigation efficiencies, what makes them unique is their focus on recycling. Delta Plastics collects used polytube at the end of the season for recycling, which keeps farms clean and reduces landfill waste. In fact, Delta Plastics is one of the largest recyclers of heavily soiled plastic in the U.S. Since 1998, they have diverted 1 billion pounds of waste material from landfills. They recover, clean and process more than 150 million pounds of material each year, and they continue to expand capacity to efficiently handle growing demand.



H2O INITIATIVE

Clearly, Delta Plastics is committed to enhancing agricultural production and profitability while caring for our water resources and the environment.

Why Water MATTERS



PHOTO: USA RICE

Water is essential for our existence, including its role in providing the food we grow and consume. In Arkansas, this is most evident in the rice production areas of the lower Mississippi Alluvial Valley. This area features intensive cultivation of rice, soybeans, cotton, and corn, all of which are irrigated primarily from the shallow alluvial aquifer.

In 2016 the Arkansas Natural Resource Commission (ANRC) estimated there were approximately 50,000 registered wells in the state, of which more than 98 percent are agricultural. Most of these are irrigation wells in eastern Arkansas. The most recent estimate shows 8,036 million gallons per day (Mga/d) are pumped from this aquifer; significantly more than the estimated sustainable yield of 3,374 Mga/d. Recognizing the need for water conservation, Rice Stewardship partners are working to improve water use efficiencies throughout the region.

Currently, ANRC has designated several “critical groundwater areas” across eastern Arkansas where water conservation is most needed. The USDA-NRCS has led the effort to reduce water use through its Environmental Quality Incentives Program

(EQIP) and Conservation Stewardship Program (CSP) programs. Starting in the year 2000, NRCS invested approximately \$25 million through the Grand Prairie Irrigation Project. Starting in 2012, NRCS invested \$42.2 million through the Mississippi River Basin Initiative (MRBI). These funds were channeled through their EQIP program and targeted conservation practices which directly reduced agricultural water use in critical groundwater areas. While these programs were enormously successful in creating more efficient water delivery and recovery infrastructure, the agency realized a need to include water management planning in its offerings. Adding the Rice Stewardship National RCPP in 2015 accelerated this initiative.

Starting in 2015, a total of 72 conservation contracts focused on irrigation management by farmers were funded under EQIP, yielding 22,185 crop-acres under prescriptive water management activities in eastern Arkansas. This program will expand further with the addition of the Mid-South Water Stewardship RCPP scheduled to begin in fall 2017.

What is

ALTERNATE WETTING AND DRYING?

Alternate wetting and drying (AWD), sometimes called intermittent flooding, is an irrigation practice in rice where the initial flood is established, then fields are allowed to dry, and then flooded again. This process can be carried out throughout the growing season. The goal is to save irrigation water, capture more rainfall, and save money with reduced pumping. If the soil is allowed to dry significantly, a reduction in methane emissions also occurs, adding a second benefit to the practice. AWD requires good irrigation plumbing and attention to details to be delivered successfully. Dr. Merle Anders, a leading expert on AWD, supports Rice Stewardship efforts and helps rice producers succeed in this new and evolving practice.

Building Water Resources IN TEXAS

Reservoirs along the Texas mid-coast provide water for irrigation and habitat for waterfowl and other water birds during drought years. The Lane City Reservoir, currently under construction, and the Prairie Conservation Reservoir being planned will provide water for downstream needs, lessen demand on upstream reservoirs, and reduce necessity for trigger levels in the Lower Colorado River Authority's (LCRA) water management plan.

The 1,100-acre Lane City Reservoir will hold 40,000 ac-ft of water and is designed to scalp excess river flows for storage until needed. Water will be moved in and out of the reservoir, adding up to 90,000 ac-ft per year to the region's water supply. Construction remains on schedule, and the reservoir is expected to be operational in late 2018.

An \$8-million RCPP proposal for the Prairie Conservation Reservoir was approved by NRCS in 2017. LCRA led the proposal with assistance from DU, USA Rice and other partners. This 2,000-ac-ft reservoir will save up to 20,000 ac-ft of irrigation water ordered from the Highland Lakes in a typical year.

Both reservoirs will take advantage of annual rainfall totals in the lower basin area, which are typically twice that received in the Highland Lakes

region. The early, heavy rains this year were exactly the kinds of events that the reservoirs are designed for, capturing the extra water in the river without impacting flows to Matagorda Bay. In fact, water coming downstream during and after last year's May rains could have filled the Lane City reservoir about six and a half times. Ducks Unlimited and USA Rice will continue to support the creation of off-channel reservoirs in the Texas mid-coast as a solution for limited water availability.



PHOTO: LCRA

The Lane City Reservoir should be operational by the end of 2018.

Rice and Ducks IN WASHINGTON, D.C.



Members of the Rice Stewardship Partnership and USA Rice and Ducks Unlimited staff gathered for a photo with Congressman Rick Crawford (AR-1), far left.

The main focus for the Partnership's policy work is the upcoming Farm Bill. Given the economic and environmental successes of voluntary, incentive-based conservation programs in the 2014 Farm Bill, we will continue to promote them. It will also be important to help Congress find ways to incentivize practices that have huge, off-farm environmental benefits, but few immediate on-farm benefits.

The RCPP and other programs important to rice producers and waterfowl must remain. Ducks Unlimited and USA Rice staff in Washington, D.C. will be presenting a unified message about the importance of popular financial assistance programs to rice growers for managing water, protecting wildlife and making their crops more sustainable and profitable.

Like most bills, funding will be key to many decisions made in the next Farm Bill. The Agricultural Committees will most likely be faced with tough budget conditions, and the Partnership will be working to ensure that conservation programs are not disproportionately impacted. Most of our focus will be on the "big five" programs, the Environmental Quality Incentives Program (EQIP), the Conservation Stewardship Program (CSP), the Conservation Reserve Program (CRP), the Agricultural Conservation Easement Program

(ACEP), and RCPP. Both ACEP and CRP took significant funding reductions in the 2014 Farm Bill, so legislators will be looking at the impacts those cuts made and looking for ways to make the programs more robust and efficient.

EQIP is one of the most popular and effective conservation programs and the one through which much of our RCPP work is done. Extremely popular on Capitol Hill, the program pays for a portion of the cost of implementing infrastructure improvements that facilitate conservation.

CSP, with more than 80 million acres currently enrolled, is going through a transitional period as NRCS works to make it easier to understand and more transparent. CSP's biggest champion, Senator Tom Harkin (D-IA), has retired, so some in Congress may look at this program for further reform and possible cuts.

USA Rice and Ducks Unlimited have worked with hundreds of producers and other partners to harness the tremendously powerful and innovative RCPP. The implementation of our RCPP projects across the country is showing legislators and other decision-makers its powerful impact. Because Congress typically looks more critically at newer programs, supporting reauthorization and strong funding levels for RCPP will be paramount.

The Partnership HAS AN INCREDIBLE REPUTATION IN THE HALLS OF CONGRESS FOR COLLABORATION AND COMMON-SENSE SOLUTIONS. BECAUSE WE PRESENT A UNIFIED VOICE FOR CONSERVATION AND COMMODITIES, WE ARE OFTEN LOOKED TO FOR GUIDANCE AND LEADERSHIP. IT IS CRITICAL THAT OUR MEMBERS SPEAK TO THEIR ELECTED LEADERS AND EMPHASIZE THAT VOLUNTARY, INCENTIVE-BASED CONSERVATION PROGRAMS ARE THE BEST WAY TO PROTECT OUR NATURAL RESOURCES AND ACHIEVE A SUSTAINABLE AGRICULTURAL INDUSTRY.

Gulf Coast Producer Profile

FRUGE FAMILY FROM EUNICE, LOUISIANA

PHOTO: VICKY BOYD, RICE FARMING MAGAZINE



We DON'T HAVE ANY WATER SHORTAGES IN LOUISIANA, BUT IT'S ALMOST CERTAIN THAT WE WILL. I THOUGHT WE NEEDED TO BE PROACTIVE RATHER THAN REACTIVE.

– Michael Fruge

Michael Fruge checks a flow meter installed as part of his participation in the RCPP program.

Thirty-five-year-old Michael Fruge learned to farm at his father's knee. His father, Raymond, learned from his uncles. Like so many farm families across the country, working the land, watching their crops grow and rejoicing in the harvest has fueled the Fruge family for generations.

Together, the Fruges farm about 1,300 acres of rice and 1,400 acres of soybeans in southwest Louisiana. Every acre they farm is leased, emphasizing the importance of conservation programs that work for farmers and landowners.

Raymond has been involved with making improvements to the land and his farming operations for nearly 20 years. Through NRCS programs like EQIP, they have leveled fields and installed pipe drops to slow and hold water, reducing nutrient and sediment loss. As part of the USA Rice Leadership Class, Michael learned about CSP and other programs that could advance their conservation practices and farm sustainability even more.

Today, the Fruges participate in the RCPP and MBHI (Migratory Bird Habitat Initiative) programs through NRCS and a waterfowl rest area program through the Louisiana Department of Wildlife and Fisheries. As the southern district sales manager for Horizon Ag, Michael has witnessed changes and challenges in rice farming across the country. For

him, talking to Texas and California rice producers about their struggles with water availability was a wake-up call.

"We don't have any water shortages in Louisiana, but it's almost certain that we will. I thought we needed to be proactive rather than reactive. Let's be ahead of the curve. Let's have the data on water inputs and be as efficient as possible with our use of water so that, when restrictions come, we will be as ready as we can be," Michael said.

This proactive approach is just one reason Raymond (2005) and Michael (2017) have each been named St. Landry Parish Conservation Farmer of the Year. Michael is currently the chairman of the Louisiana Rice Growers Association.

"It all goes back to sustainability," he explained. "We have to care for these acres so that we can continue to farm them. Dad's been farming all my life, but I'm a beginning farmer. To stay on these lands, we have to conserve our water and take care of the land for the longevity of these operations."

Michael and his wife, Sarah, don't know if their children will want to farm, but it's important for them to have the opportunity if they do.

"It's a good living to have and to raise your children in," Raymond said. "It's fun to be with nature all the time."

Nutrient MANAGEMENT

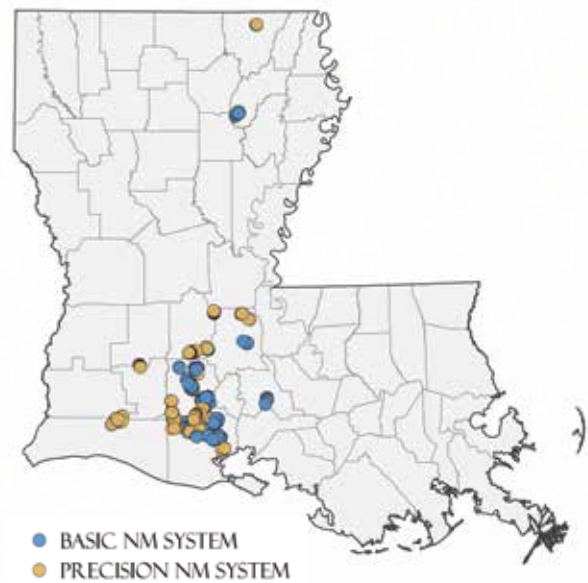
From a rice producer's standpoint, the goal of nutrient management is to apply the necessary fertilizers to achieve maximum crop yield without wasting any money. The producer wants to achieve maximum economic return on investment. Historically, the amount of fertilizer applied is based on experience, soil testing, and a little bit of guesswork. Nutrient management has become more robust with advancing agronomic science, but biological factors like weather, plant pests, and rice variety responses add uncontrollable variation. Furthermore, economic factors like commodity prices and input costs also temper the decision-making process.

From an environmental standpoint, the primary purpose of nutrient management is to minimize nutrient losses to surface and groundwater. This includes both organic sources of nutrients such as manure and chicken litter and commercial fertilizer products. The primary nutrient of concern has been nitrogen because of its contribution to the Gulf of Mexico's "dead zone." The dead zone is created each year as algae fed by the nutrients grow, die and decompose, creating vast areas of low dissolved oxygen.

Nutrient management and resulting plans follow the 4R principles (right source, right rate, right time and right place) and are a priority for producers and Rice Stewardship efforts. These plans are developed thanks to financial support from The Mosaic Company. The application of planned prescriptions is supported with financial assistance from the NRCS. Working together in this way results in wins for the producer and the environment.

During the last year, under the National Rice RCPP, Louisiana field staff assisted producers with completing plans on approximately 22,000 acres. Half of these acres followed basic nutrient management, where simple soil testing and past yields result in a recommended nutrient budget and application of 4R's. The remaining acres followed precision nutrient management, including refined grid soil testing and variable rate fertilizer application. With support from The Mosaic Company and NRCS, Louisiana has another 24,000 acres of nutrient management planned for 2017-2018, with a focus on precision techniques.

2016 Louisiana Nutrient Management





A Message from THE TEXAS NRCS

In Texas RCPP has illustrated the many benefits of coupling conservation-focused partners with unique public and private sector funding opportunities to strengthen long-term conservation relationships with producers. RCPP allows the melding of economic and conservation components to optimize productivity investments while ensuring a sustainable future for the land, wildlife habitat and water quality and quantity.

Across the landscape, NRCS and partners are experiencing refreshed conservation efforts. We are seeing reinvigorated relationships with our partners and, more importantly, with our clients through our technical assistance and follow-up efforts to help them carry out conservation plans.

“RCPP continues to be a unique NRCS program built off like-minded partners who pool together their resources with a vision of long-term sustainability of natural resources,” said Texas NRCS State Conservationist Salvador Salinas. “Texas rice producers continue to experience appreciable benefits to the land and working relationships through the RCPP. Through conservation planning and addressing the production and the economic sides

of an operation, rice farmers have hope that their operations can remain viable.”

Texas RICE
PRODUCERS
CONTINUE TO
EXPERIENCE
APPRECIABLE
BENEFITS TO THE
LAND AND WORKING
RELATIONSHIPS
THROUGH THE
RCPP.

– *Salvador Salinas*

In following its mission of Helping People Help the Land, NRCS continues to provide exceptional technical assistance to help rice farmers optimize productivity efforts while improving their rice production lands, keeping in mind the importance of beneficial wildlife habitats. In turn, these wildlife habitats add aesthetic value to these lands and provide an opportunity for the public to gain a positive environmental perception of production agriculture.

The heavily traveled IH-10 traverses miles of rice fields in production and in fallow. Drivers across this expanse have an opportunity to see a locally

grown food source, habitat for waterfowl and a second crop of crawfish being grown in these fields. Addressing perception is another vital element of sustainable agricultural production as urban sprawl and population increase continues in the state’s rice producing region. RCPP has been a critical component in helping sustain local rice producers in some Texas counties, and the NRCS and Rice Stewardship partners will continue to harness its opportunities for water, wildlife and people.

Mississippi Alluvial Valley Producer Profile

SULLIVAN FAMILY FROM BURDETTE, ARKANSAS

Mike Sullivan, who farms with his son, Ryan, near Burdette in northeast Arkansas, is one of the rice producers working with USA Rice and Ducks Unlimited through the Rice Stewardship Partnership. The Sullivans have participated in the NRCS Regional Conservation Partnership Program (RCPP) for Rice Stewardship.

As part of their participation, the Sullivans flooded fields in the winter to provide habitat for waterfowl and improve water quality. By putting boards in their water control structures in October, they captured rainfall over the winter. That gives the sediments and nutrients in the water time to settle out before leaving the field. When they pulled their boards to drain the fields in February, much cleaner water ran off. In the meantime, they had tremendous use by waterfowl.

"I've never seen ducks east of Interstate 55 before," Mike said. He was skeptical about attracting ducks in that area of the county, but he was excited to call Ryan one day and tell him that a field near the home place was covered up with ducks.

"The public has noticed that more ducks are in the county, too," Mike said. Mike has people asking about his flooded fields and commenting on seeing all the ducks. The weir boxes make all the difference. "The system that works for rice farming also works great for waterfowl," Mike said.

Ryan has always been interested in conservation. He told his dad for years they didn't have ducks because they didn't hold water on the fields. He

observed other areas of the county that had ducks where fields had been flooded. "Ryan has been doing waterfowl management on a small scale, but the RCPP has allowed him to do this on a wider scale," Mike said.

"I'm really appreciative of the way DU, USA Rice and NRCS have partnered to make this program so successful and how easy it has been to work with all the partners," Mike said.

Mike believes he has also benefitted from working with researchers with the University of Arkansas and the USDA Agricultural Research Service at nearby Arkansas State University.

"We've pretty well turned over 1,500 to 2,000 acres of our rice farming operation for research to Dr. Michele Reba and Dr. Joe Massey at the ARS Delta Water Management Research Unit located on campus at Arkansas State," he said. "They're taking small-scale research to a whole-farm approach. Dr. Reba likes to refer to Ryan and I as her guinea pigs.

"We're happy to cooperate because I think the key to what we're trying to do is to be proactive instead of reactive," he said. I went to the (Arkansas Soil and Water) Education Conference in Jonesboro, and they spent a whole day talking about how water is a finite resource, and we've got to figure out a way to do things differently than we have in the past."

The Sullivans recognize that water conservation will become increasingly important in the years ahead.

"If we're not in the forefront of this, cooperating with the researchers and helping them, we're going to have problems," Mike noted. "I hate to think of Ryan having to deal with regulators telling him he has 20 inches of water, and he has to figure out a way to make it work."

The Sullivans have also worked with alternate wetting and drying on their farm. "It's almost become comical with us because for years we told our employees they had to make sure they kept a flood on our rice fields. So you can imagine the reaction when you tell them not to turn on the irrigation pump for 10 days."

Ryan Sullivan and Mike Sullivan remove the boards that held water for waterfowl and water quality improvements and drain their fields in time to prepare for planting.



The SYSTEM THAT WORKS FOR
RICE FARMING ALSO WORKS GREAT
FOR WATERFOWL.

- Mike Sullivan



BASF

Chemistry for a Sustainable Future



BASF helps rice producers get the most from every acre. They offer a variety of herbicides, fungicides, insecticides and seed treatment technologies that provide the highest level of crop protection. They invest \$442 million globally each year in research and development and are dedicated to discovering and developing new environmentally-sound agricultural products and technologies.

As a leading developer of herbicide-tolerant rice technology, BASF offers the Clearfield® Production System, an innovative agronomic solution. It provides farmers value and benefits to control weeds, including red rice, which is one of the biggest threats in rice. Clearfield® helps farmers by combining high-yielding seeds with broad-spectrum herbicides tailored to regional conditions, delivering efficient, season-long weed control, crop quality and global market acceptance.

In 2050, more than nine billion people will live on our planet. The world population and its demands will keep growing, while the planet's resources are finite. If nothing changes, we will need the resources of almost three of our planets to meet the demands of the population. This will pose huge global challenges.

Chip Shilling, BASF's Regional Manager for Soil Management and Sustainability, states, "Growing demand is putting an increasing strain on our planet, so sustainability is crucial for our future. Partnerships enable BASF to develop broader solutions to meet society's needs, which is a growth driver for our business. We are excited to partner with USA Rice and Ducks Unlimited and their multitude of programs being rolled out on working ricelands. Their programs put boots on the ground, assist farmers at local levels, and facilitate implementation of sustainable practices."

RIVIANA FOODS, INC.

Making Meals Memorable

Though many are more familiar with the individual rice and pasta brands such as Minute Rice, Mahatma, Success and Blue Ribbon rice and Ronzoni, No Yolks, and American Beauty pastas, Riviana Foods is a household name in rice country. Some of our brands have been American favorites for more than 100 years. As America's leading rice company and the nation's second largest provider of pasta products, Riviana's portfolio includes more than 20 trusted brands and 500 products distributed around the world.

Along with our dedication to quality products, Riviana Foods is proud of a long-standing tradition of ethical business conduct and our unwavering commitment to protecting the environment and the health and safety of our employees and the communities in which we work. In fact, outstanding health, safety and environmental performance is among our most important core values and is an integral part of our business management.

As such, Riviana Foods was one of the first financial sponsors of Rice Stewardship. We wanted to

Riviana's portfolio includes more than 20 trusted brands.



support the conservation of working ricelands, water, and wildlife throughout North America. A vibrant rice industry also supports rural communities, providing jobs and commerce while feeding a hungry world.

“We appreciate the conservation strategies delivered by the Rice Stewardship Partnership,” said Vice President of Riviana Foods Keith Gray. “Striving for environmental wins in water, soil, and wildlife conservation while helping rice producers achieve a better bottom-line is a goal we can all get behind.”

PHOTO: JAMES MORRIS/CALRICE



Striving FOR ENVIRONMENTAL WINS IN WATER, SOIL, AND WILDLIFE
CONSERVATION WHILE HELPING RICE PRODUCERS ACHIEVE A BETTER
BOTTOM-LINE IS A GOAL WE CAN ALL GET BEHIND.

– Vice President of Riviana Foods Keith Gray

Central Valley Producer Profile

MONTNA FAMILY FROM YUBA CITY, CALIFORNIA



We SEE WATERFOWL AS
A PARTNER, SO A CHANGE IN OUR
FARMING PRACTICES THAT BENEFITS
THEM ALSO BENEFITS US."

– Al Montna

The Montna Family

Ducks and rice have been inextricably linked since long before the first settlers laid eyes on the Sacramento Valley. As far as Al Montna is concerned, that bond will remain strong for generations to come.

"Profit, people, and planet have always been the backbone of our farming ethic," Al said. "You have to look at the whole: run a sound business, and you can do conservation and help people."

Al has been involved with Ducks Unlimited since the 1960s. "I've been hunting my entire life, particularly waterfowl, so supporting DU just seemed natural," he explained. After college, building his farming business took him away from the organization, but in the 1980s, DU biologists got him involved again with the Rice Roller project. "It all started with the Rice Roller," Al recalled. "Rolling the stubble let us stop the annual burning."

An end to burning meant important food and habitat were left for the thousands of migrating waterfowl that visit California's Central Valley each year. "Water, rolling, and ducks help us clear the field for next year's production," Al explained. "We see waterfowl as a partner, so a change in our farming practices that benefits them also benefits us."

Rice is a major food source for people, waterfowl, and other wildlife, and Al doesn't want to see us lose another acre. His strong belief in the connections between farming, the people it feeds, and the opportunities it presents to improve habitat for waterfowl is what got him involved in creating the USA Rice-DU Stewardship Partnership, on which he still serves as co-chair.

"The partnership we've formed is one that will benefit waterfowl and other wildlife, rice producers, hunters and American citizens alike," Al said. "We'll work together and build upon our common interests and challenges to sustain waterfowl and rice production on the landscape."

Al's influence on the next generation of rice growers is apparent in his daughters, Nicole Montna Van Vleck and Michelle Montna Vogt, who are involved on the farm and with legislative groups for rice and water. Nicole caught the hunting bug and, along with her children, Christian and Tori, heads afield with Al each year. Nicole and Michelle believe, as their father does, that if you "maintain production, you will maintain the birds."

Today, Nicole is the president and CEO of Montna Farms. She serves on the board of

the American Commodity Company and the California Rice Commission (CRC). She has been a director at CRC since 2000 and chair of the California Rice Producers Committee for the last four years. Over the course of her life, Nicole has seen two things grow in importance for rice producers – water and communicating their story.

As a board member of the Northern California Water Association and chair of their communication committee, Nicole volunteers countless hours maintaining northern California's water rights and advancing solutions to the state's water needs for agriculture, communities and the environment. She also serves as an officer for two local water districts and sits on the USA Rice Farmers board.

Nicole understands the vital role that telling the story of working ricelands plays in ensuring its future. As such, she has been an active member in the CRC's communications committee, blogging and participating in videos to enhance the public's understanding of rice farming and connected resources, such as waterfowl and other wetland dependent wildlife.

“Rice agriculture has a unique story to tell. Our working wetlands provide more wildlife habitat than any other commodity crop and play an important role in the water cycle,” Nicole said. “People have to understand what we do, not only for the people we feed, but also for the waterfowl and other wildlife we support.”





Agroecology:

UNDERSTANDING ECOSYSTEM BENEFITS DERIVED FROM SUSTAINABLE RICE FARMING

*A*gricultural systems have historically been managed for maximum production of food and fiber to support our ever-growing human population. However, many of these agricultural landscapes, especially rice, also provide a wide range of additional ecosystem goods and services that are valuable to society, our economy, and the environment, including a wide variety of wildlife species.

Ecosystem services are the direct and indirect contributions of ecosystems to human well-being. Key ecosystem services provided through advanced management of ricelands include nutrient cycling and soil health; improvements in water and air quality; managing water quantity; and/or providing cultural values through recreation and ecotourism.

It is no secret that winter flooded rice is valuable habitat for North American waterfowl populations. While we can quantify this foraging value to waterfowl, many of the other benefits derived from sustainable rice production still need to be measured and communicated. Through our Rice

Stewardship efforts, we aim to evaluate conservation practices implemented on ricelands throughout the Mississippi Alluvial Valley and Gulf Coast to assess impacts on a wide array of ecosystem services.

First, using data collected through Rice Stewardship efforts, Field to Market's Fieldprint Platform® will help us document the many outcomes provided through integration of all components of the rice farming system. Specific ecosystem services to be indexed here include soil conservation, soil health, water quantity, energy and greenhouse gases, reflecting efforts to improve on-farm efficiencies and environmental performance.

Over time, as more data is collected and compiled, a more detailed analysis will emerge, including quantitative and qualitative assessment of goods and services and impacts to rice cooperators. This level of information will aid in describing program success and designing national policies related to sustainable agroecological approaches such as those led by the rice industry today.

Ecosystem Service: SOIL RETENTION

Under the National Rice RCPP, producers in southeast Missouri held winter rainfall on 13,390 acres in winter 2016-2017. Approximately two-thirds of these acres were no-till while the remaining third was tilled after harvest. If these acres had been traditionally tilled in fall and left to drain rainfall over winter, a total of 6,680* tons of soil would have been lost from fields. With the increased level of no-till and holding winter rainfall, only an estimated 780 tons of soil were lost. That means participating producers reduced soil losses by 88 percent and prevented 380 dump trucks of soil from entering the waterways of southeast Missouri. Soil loss prevention is just one of the ecosystem services and benefits we plan to calculate moving forward to help us communicate the importance of Rice Stewardship to a broader audience, including policy decision makers.

* Based on research published in the Journal of Soil and Water Conservation (2009 Vol. 64:3).

Measuring SUCCESS



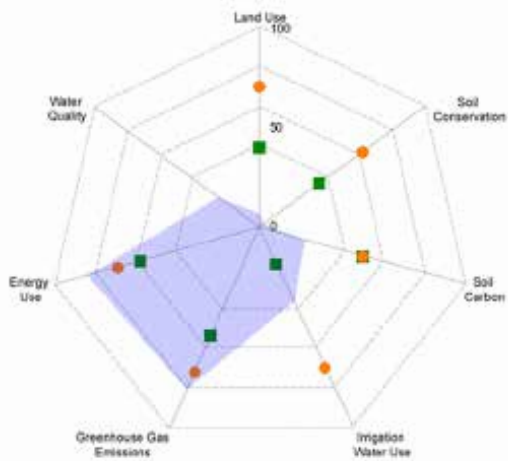
One of the tools we are using to track resource inputs and savings through Rice Stewardship efforts is the Fieldprint® Platform. Designed by Field to Market: The Alliance for Sustainable Agriculture, the platform is an online application that allows producers to benchmark their farm's sustainability performance against as many as eight sustainability indicators. The available sustainability indicators are land use, soil conservation, soil carbon, irrigation water use, energy use, greenhouse gas emissions, biodiversity, and water quality. Producers input on-farm and production data, and the Fieldprint® Platform produces a "spidergram" that gauges each field's sustainability performance.

The value of the Fieldprint® Platform to producers is the ability to compare their operation to their peers enrolled in our stewardship projects, and to state and national benchmarks, helping them identify areas of production where they can lessen their impact on the environment. In subsequent years, producers can not only compare

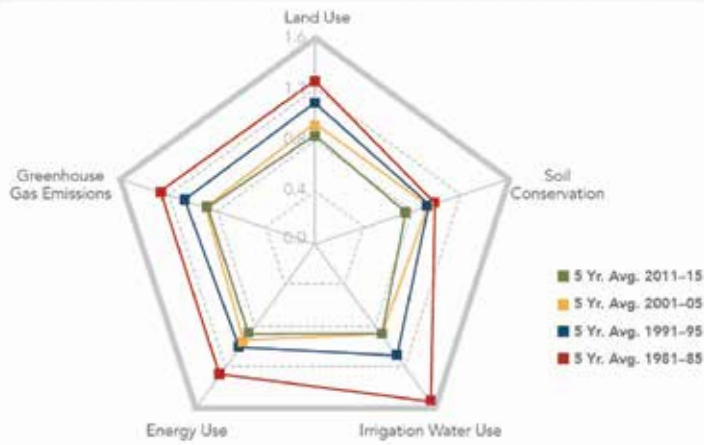
their fields' results to peers and benchmarks, but they can also compare it to prior-year results and see how the practices they have put in place affect their footprint.

For Rice Stewardship sponsors like the NRCS, the Fieldprint® Platform provides a first-year baseline from which to work. In subsequent years, we can determine what impact conservation practices have on resources. Ultimately, this will help us all ensure that our project's practices are truly valuable to conservation and achieving the desired improvements.

To rice supply-chain sponsors, like Walmart, The Mosaic Company, BASF, RiceTec, Dow AgroSciences, and others, the Fieldprint® Platform helps to identify conservation efforts that result in less impact on resources and focus their production support or acquisition of ingredients accordingly. Companies have been increasingly focused on sustaining natural resources while feeding the world. The Fieldprint® Platform gives them quantifiable metrics to use as they make business decisions.



Individual Producers WILL GET A SPIDERGRAM LIKE THIS, WHICH SHOWS NATIONAL (GREEN SQUARE) AND STATE (ORANGE DOT) BENCHMARKS COMPARED TO AN INDIVIDUAL PROJECT FIELD (PURPLE AREA).



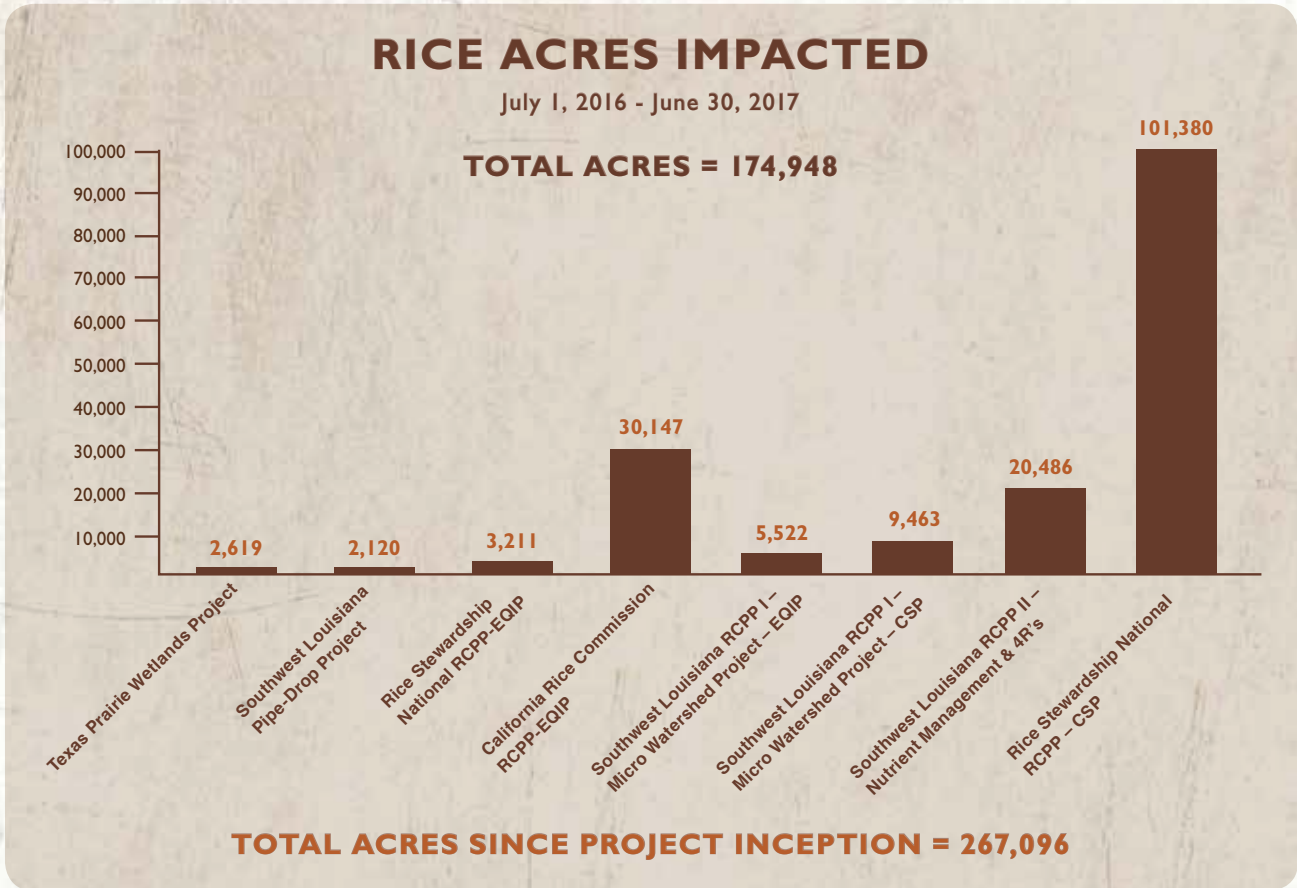
National Benchmarks FOR RICE PRODUCTION FROM 1981-2015 DEMONSTRATE \neq CONTINUOUS IMPROVEMENT.

Source: *Field to Market: The Alliance for Sustainable Agriculture*, 2016. Environmental and Socioeconomic Indicators for Measuring Outcomes of On Farm Agricultural Production in the United States (Third Edition).



Financials

2016-2017



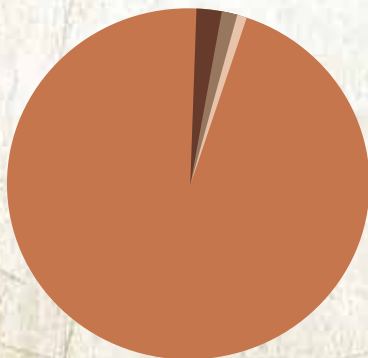
RCPP = Regional Conservation Partnership Program EQIP = Environmental Quality Incentive Program CSP = Conservation Stewardship Program

FINANCIAL SUPPORT

(July 1, 2016 - June 30, 2017)

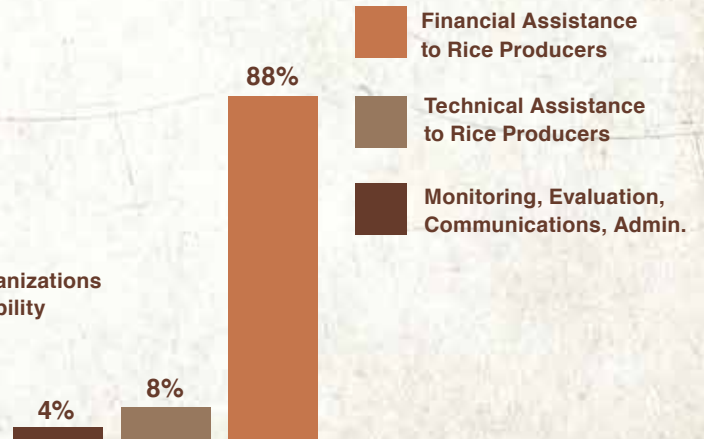
\$20.6 MILLION

SOURCES OF SUPPORT AND REVENUE:



- 89% USDA Natural Resources Conservation Service
- 5% Federal/State Wildlife Agencies
- 4% Foundations & Conservation Organizations Supporting Agricultural Sustainability
- 2% Rice Supply-Chain Corporations

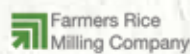
WHERE THE MONEY GOES



Financial Supporters

THANK YOU TO OUR LEADING FINANCIAL SUPPORTERS

Walmart  Nestlé PURINA. 



*A Special Thanks to
Bob and Kim Spoerl for their financial support.*

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
Anheuser Busch
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 & Agriculture
Bunge North America
California Rice Commission
California Rice Research & Promotion Board
Central Valley Joint Venture
City of Eagle Lake – Texas
Coastal Bend Groundwater Conservation District
Colorado County SWCD
Colorado County – Texas
Colorado Water Issues Committee
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
Kellogg's
Louisiana Department of Agriculture & Forestry
Louisiana Department of Environmental Quality
Louisiana Rice Growers Assn.
Louisiana Rice Research & Promotion Board
Louisiana State University AgCenter
Louisiana Rice Growers Assn.
Louisiana Rice Mill
Lower Colorado River Authority
Lower Mississippi Valley Joint Venture
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.
Riceland Foods
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 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

We HAVE TO CARE FOR THESE ACRES
SO THAT WE CAN CONTINUE TO FARM THEM.

- Michael Fruge, Gulf Coast Producer



*American avocet chicks also depend
on habitat in working ricelands.*



*For more information,
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501-309-8841

www.ducks.org/ricestewardship