PIVOTPOINT



Putting Sprinklers in Their Place

Advanced Technology Gives Growers More Choices Finding New Water Sources The Importance of Valley_® Values

Letter from the PRESIDENT



Ark Twain said: "In the spring, I have counted 136 different kinds of weather inside of 24 hours."

Exaggeration? Maybe. But growers know it's not too far from the truth, and that's just what you can surmise from spring weather.

Farmers are expected to plan for greater gains in yield and to produce for an ever-growing world population. As we all know, the weather has a significant impact on the betterment of that expected growth.

At Valley_®, we're proud to take a bit of the weather factor out of farming and provide some predictability. We're helping you conserve water for future generations, increase profitability from your land and enjoy newfound freedom – by putting time back on your side.

Advancing Valley technology is a pivotal measure of our daily performance. As a result, it's how we sustain and enhance our product technology that elevates your livelihood.

We want you to expect a lot from us: from our products, our dealers and our technology. You should expect your irrigation equipment to be the most reliable and durable in the business, because as we all know, you certainly can't expect the weather to be.

Or as Twain put it, "Climate is what we expect, weather is what we get."

LEN ADAMS

President, Global Irrigation

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RRGATION A Key Role in Feeding

the World



Today's farmers are charged with the immense undertaking of providing food for an ever-growing world population. And many have to perform under the pressure of restrictions to conserve land and water.

It's a substantial responsibility, and one that people outside the agricultural community don't often consider.

According to the United Nations Food and Agricultural Organization (UN FAO)¹:

- The world population is projected to increase 40 percent by 2050
- Only 20 percent of the world's croplands are irrigated and that cropland yields 40 percent of the global harvest
- Irrigated farms can produce 100 to 400 percent higher yields for most crops
- Center pivot and linear irrigation are consistently at the top of efficient methods of delivering water, reaching 95 percent efficiency or greater, depending on sprinkler package design, irrigation scheduling and agronomic practices

With forecast stats like these, irrigation is clearly part of the solution. Without it, growing the volume of food the world needs will prove challenging. Just ask John Schuerman.

Schuerman has been working on his family farm near Seymour, Ind., since he was 14 years old. He's not new to farming, but he is new to center pivot irrigation. In fact, he is one of the first in the area to implement it.

He worked with Andy Wolka of B&W Agri Products in Seymour to install his first two Valley center pivots last spring and installed two more in the fall.

Wolka says he's encouraging new irrigators to start watering conservatively.

"We know water will be at a premium, even in places that have plenty now, so we want to do this right and start out with conservation in mind," he explains.

Schuerman didn't get his pivots in until after the growing season started, and there were three weeks of dry weather before the pivots were up and running.

"On my irrigated land, I brought in 200 bushels of corn per acre," says Schuerman. "On the land I didn't irrigate, I had 120 to 125 bushels. Even starting late, I saw a tremendous gain with my difference in yield. I can't wait to see what happens when I'm able to irrigate for a full growing season."

That's a yield increase of more than 60 percent. Results like Schuerman's will be crucial in the future, since the latest projections indicate that agricultural production must grow by 70 percent by 2050 in order to feed an additional 2.3 billion people.²

"It's a whole lot better than crop insurance, I can tell you that," Schuerman says. "If bad times hit, irrigation can help a lot.

"I can see more and more people advancing to pivot irrigation because we need to produce more crops on the same amount of land. Irrigation is one of the only means to do just that."

While organizations, corporations and government entities are researching ways to increase food production, in the end, it will be up to growers to make it happen. Examples like this further prove that irrigating is more productive than dryland farming, and that irrigation could make all the difference in feeding the growing population.

¹ Food for all – World food summit – Agricultural machinery worldwide. www.fao.org ² 2050: Increased investment in agricultural research essential. www.fao.com

ARE YOUR SPRINKLERS IN THE **RIGHT PLACE** AT THE **RIGHT TIME?**





"Boombacks more than pay for themselves if you've got any slope at all."

— Greg Juul, Oregon potato grower Boombacks are extensions that place sprinklers away from the pipe. According to Jerry Gerdes, Valley product manager for water application, this setup provides less intensity during application, which increases water infiltration, decreases runoff and reduces wheel track depths.

Greg Juul grows potatoes and onions for the fresh market, along with grass seed, alfalfa and other crops in the northeast corner of Oregon. He started using boombacks about 15 years ago at the drive unit, mostly to reduce wheel rutting, but he gained far more than that.

Today, Juul has Valley Boombacks on the last three spans of more than half of his center pivots. He uses Nelson Orbitors to provide the proper water patterns for his field conditions.

"Slope is a big factor for us," says Juul. "We don't have any flat circles, and we've got slopes ranging from 5 to about 20 percent. With the boombacks, the water pattern is 75 feet wide, and runoff is no longer a factor.

"In fact, I'd say runoff in our fields has been reduced probably 85 percent. In the wheel tracks, probably 60 percent."

Research backs up Juul's claim. A recent study, published in *Applied Engineering in Agriculture*¹, compared runoff from in-line drops with boom systems. According to the study, with all other factors being equal, using boombacks can reduce runoff by as much as 24 percent, especially after several applications.

Juul says his boombacks also help conserve water.

"We've been under water rights regulations since 1989, so we haven't been able to extract any additional water out of the Columbia River each year since then," he says, "but [with boombacks] we are able to use lower pressure and get excellent water penetration.

"Boombacks more than pay for themselves if you've got any slope at all."

Valley Boombacks and AquaDock™ give you more options.

Water infiltration. Runoff. Conservation. Where your sprinklers are placed at any given time can affect your entire operation. Here are two placement options that can help you irrigate more efficiently and effectively.





"AquaDock maintains a high level of uniformity when growing tall crops."

Jerry Gerdes,
Valley product manager

As tall crops grow taller, irrigators who use drop hoses have two options: Either let the hoses drag through the canopy, causing uniformity issues, or raise the hoses.

Most would agree that raising hoses is a better option, but until recently, that required someone to scale the spans to wrap hoses. Now with AquaDock[™] drop hose docking stations, growers can easily change the drop hose height from the ground with a lift pole.

John MacBeth of Sagebrush Farms in Washington started using AquaDocks on three pivots over corn last season. He says that while he wants the sprinklers lower during germination, he also wants to maintain uniformity and avoid dragging the hoses through the corn.

Pat Tolman of Valmont Northwest in Pasco, Wash., says he expects to see steady adoption of AquaDocks, especially since hoses can be damaged when they're rolled in the traditional manner.

"Rolling them up on the pipe can flatten the hoses, which can cause less effective water output," explains Tolman. "That's something growers need to consider when deciding whether to purchase an AquaDock system.

"It can be a time-saver when it's time to raise or lower hoses, too."

"I'm still getting used to it," MacBeth says, "so hanging the hoses still takes some time. It takes a bit to perfect. But taking the hoses down is a lot faster with AquaDock.

"Overall, it's a good system for getting the sprinklers where they need to be during the growing season."

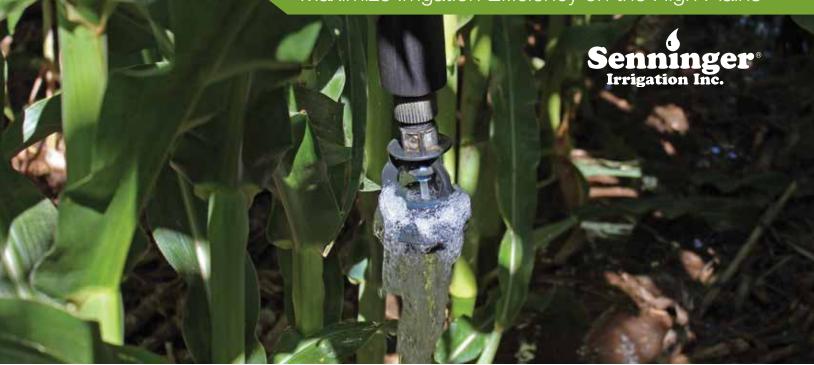
Gerdes agrees.

"AquaDock maintains a high level of uniformity when growing tall crops," he says "When drops are left low, they can cause dry rings, which can affect yield – and yield is what it's all about."

¹ Efficacy of Boom Systems in Controlling Runoff Under Center Pivots and Linear Move Irrigation Systems by P. Nakawuka, R. O. Okwany, T. R. Peters, K. Desta and S. H. Sadeghi

LDN Bubblers

Maximize Irrigation Efficiency on the High Plains



Here at Senninger[®] Irrigation, we know growers in the High Plains region are concerned about water availability.

Persistent drought conditions in the area are forcing many growers to pump more water from the Ogallala Aquifer, with some depending almost solely on the aquifer to maintain soil-moisture levels. Growers in this windy and semi-arid region also face a greater likelihood of water loss due to evaporation and wind-drift. Our Senninger team knows these conditions make it even more difficult to meet high yield demands and maintain crop quality.

That is why many growers across the region are replacing their sprinklers with our Low Drift Nozzle (LDN) Low Energy Precision Application (LEPA) Bubblers.

Growers already know that not all of the water they pump reaches crop roots. Water is prone to evaporating before it reaches the soil. It can even evaporate directly from the soil surface. Soil is also likely to overheat, crack and lose its ability to effectively channel water down to the crop's root zone.

LEPA Bubblers help growers get around these issues by applying water around 8 to 18 inches above the soil surface and directly into crop furrows. Keeping water so close to the ground helps avoid wetting crop leaves and reduces the amount of water lost to wind-drift and evaporation. That means nearly all the water pumped is absorbed by the soil.

Research by Leon New and Guy Fipps of Texas A&M shows that spray heads can experience a 17 percent water loss at wind speeds of 15 mph. With LEPA sprinklers, at least 20 percent more water will reach the soil surface compared to conventional spray nozzles. Conventional sprinklers are very susceptible to high wind speed, low relative humidity, temperature and evaporation losses.¹

Growers are also discovering that installing LEPA Bubblers on fields where they use strip-till or no-till increases soil moisture and reduces runoff and soil sealing. Crop residue protects the water from evaporation while simultaneously protecting the soil from drying out and overheating.

Others are taking LEPA irrigation a step further and doubling their drops from traditional 60-inch increments to tighter 30-inch spacing between heads to more uniformly soak the soil. The benefits of this closer spacing include less water usage, more uniform root zone coverage during pre-watering, reduced dry spots and high yields despite restricted water supplies.

"Using 30-inch spacing with Bubblers gets the job done with less energy, and nearly all of the water pumped is absorbed by the soil," says Edwin Smith, High Plains regional sales manager for Senninger Irrigation. "There are certain aspects growers need to be aware of before making a switch to this method, but with the right conditions growers could potentially increase their yields and reduce their costs."

These ideal conditions include relatively flat land, circle planting and crop residue. The maximum recommended slope for growers considering LEPA or close spacing installations is 1 percent. Planting in circle rows is necessary to increase uniform water disbursement and reduce runoff, while crop residue is needed to increase surface storage capacity and prevent soil redistribution. While just about any type of soil will benefit from close spacing, it is important to consider each soil's water-holding capacity when setting up close spaced Bubblers. Some soils, like porous sandy soils, can handle much higher application rates than others.



Vice President and Chief Economist, Doane Agricultural Services

It is impossible to know how things will turn out in 2015; what surprise events will make even the most logical and well-reasoned forecasts go off the rails. But there will be surprises this year – as there are every year. Still, it may be useful to at least contemplate how things might go and what potential developments to watch for.

Spring and summer weather will be the driving factor for crop prices, and weather is one of the things that cannot be accurately forecast. For this effort, we assume "normal" weather, which results in trend crop yields. Some deviation from "normal" is likely, but the uncertainty is by how much and in which direction.

Even with lower crop prices this spring, a big drop in total crop acreage is unlikely. We don't expect crop acreage to fall much in 2015, but a modest decline is possible. Yes, crop prices are down and margins are tight, but crop revenues still exceed operating costs and pay part of fixed costs. High acreage coupled with trend yields will result in big crops again in 2015 and 2016, and ending stocks for major crops will stay high and even increase in some cases if acreage and yield assumptions hold true.

Exports account for nearly 75 percent of total cotton demand, nearly half of wheat and soybean demand, and 13 percent of corn demand. The collapse of Russia's economy and/or further problems in Ukraine could reduce competition in the wheat market, which would be positive for U.S. farmers. And China could import more U.S. corn. There can be no doubt that the prospects for U.S. agriculture are closely intertwined with developments in other parts of the world. On the other side of the outlook, livestock prices and profits are expected to stay high in 2015. The record high prices and huge profits probably won't be matched, but the outlook is still positive. Cattle and beef production will remain low as producers try to rebuild herds depleted in part by drought conditions in recent years. But pork and poultry production are expected to increase throughout 2015, keeping livestock prices from matching or exceeding the highs recorded last year. The decline from the record highs in 2014 could be substantial, but prices should stay high enough for profits to remain positive.

Farm income will be low again in 2015, but government payments will soften the impact. The loss of direct payments was an important factor in the 2014 decline in farm income. Crop producers face the tightest margins in several years, and no relief is expected in 2015 unless weather problems develop. The tight crop margins will have producers cutting costs where they can, and capital investments will be focused on those items that increase productivity.

The uncertainty about investment tax breaks will continue at least through the early part of 2015. Congress and the administration are promising tax reform in 2015, but ideas on how the tax laws should be changed differ. Renewal of the tax breaks important to agriculture seems likely, but with the stalemate in Washington, nothing is a sure thing.

Advanced Technology Provides Growers More Choices, Information and Freedom

The days of driving out to the field in the middle of the night to check on center pivots are quickly becoming a thing of the past for many farmers. Gone are the days of turning end guns on and off in the field, wondering exactly what's happening out there and needing to be there in person to do anything about it.

And let's not forget about missed vacations, children's ballgames, hunting seasons and just "you" time. That's just the reality of a farmer's life, right?

Not anymore, and it's all thanks to technology.

"We work hard to make sure our technology keeps making farmers' lives better and easier," says Valley Advanced Technology Product Manager John Campbell. "Valley Irrigation offered computer panels before anyone else, and we'll keep being the first to bring innovation to the field."



Part of the Valley philosophy is providing growers with options that are best suited to their farms and free up time for other things. That means listening to what growers want and need, whether it's upgrading existing products or developing cutting-edge technology.

Valley BaseStation3[™]App

GAIN TOTAL CONTROL

Listening to growers was key in the development of BaseStation3[™], which lets growers monitor and control their pivots online from a computer, tablet or smartphone.

Growers said they wanted quick and easy access to the control features they use most, so Valley developed native apps for iOS (iPhone, iPad) and Android.

"The app on this is awesome," says Steve Berg, a Kennewick, Wash., farmer with 36 pivots running on BaseStation3. "It has everything on it that I like and use regularly."

"It's a little pared down from the full-sized version of BaseStation3, however, growers can still write step programs, program end guns and use all the most popular features," Campbell explains.

Growers also told Valley they wanted enhanced mapping tools, which led to the software integration of Google Maps[™] into BaseStation3.

Berg, a Valmont Northwest customer, says the addition of the Google Maps to BaseStation3 ties everything together for him.

"I have a more complete picture now," he says. "I know exactly where my pivots are, and I can base my decisions on that. It's far easier to see what's really going on."



Take the BaseStation3 App for a Test Drive

Try the BaseStation3 mobile app with the new demo mode.

- 1. Go to your app store, search for BaseStation3
- 2. Download the **FREE** app
- 3. Click the "Demo" button at the bottom of the main screen.

The demo takes users into an interactive simulation of a BaseStation3-connected farm with several pieces of equipment. Users can see the pivot move at an accelerated rate, execute commands, change end gun angles, and try out the Step Program Editor and the Notes feature.



AgSense®

BROADENING THE SELECTION

The recent purchase of a majority interest in AgSense[®] means that Valley customers now have the widest selection of monitoring and control products in the irrigation market. Growers can now buy AgSense products through many Valley dealers.

AgSense products use digital cellular technology to provide monitoring and management through WagNet[®] (Wireless Agricultural Network), a cloud-based dashboard that gives growers control for an annual subscription.

Field Commander[®], the premier AgSense product, is a GPS-driven, center pivot monitoring and control tool that provides real-time information and up-to-the-minute alarms to a cell phone, smart phone or computer. It works on all brands of pivots and control panels, and can turn an older mechanical panel into one with remote management capability.

Travis Freund of Mid-Continent Irrigation in Fremont, Neb., is a Valley dealer who has worked with AgSense for a while. He's thrilled with the affiliation between the two companies.

"It really makes sense," Freund says. "Our customers are surprised at how much time they can save by using the AgSense products, and they're also pleased with the diminishing costs of technology. Of course, our younger customers really gravitate toward this kind of technology."



Mid-Continent customer Steve Arneal has used AgSense products for about five years and currently has Field Commander on seven of his Valley pivots. He started accessing WagNet on his laptop and now uses it on his smartphone as well.

Valley Irrigation Exchange™ | YOUR AG CONNECTION

Another new addition to BaseStation3 is Valley Irrigation Exchange[™], the first and only product that connects irrigation to the other software systems farmers use to manage their farms.

Irrigation Exchange allows growers to integrate their irrigation information with other precision ag data for a broader view of what's happening in their fields, facilitating data-driven decisions on water application and nutrient management. Growers can now actively manage and monitor their irrigation equipment and implement irrigation recommendations from within other farm management systems.

All this is done while protecting the growers' data. The grower owns and controls his data and determines who to share it with and when.

Andy Smith, Valley director of technology adoption, says customers are using Irrigation Exchange already, and while in its early stage, things are going very well.

"While the goal is to provide connected irrigation management," Smith says, "we want to include more than irrigation in Irrigation Exchange. It's already an incredible service, but once the rest of the agricultural industry catches up with us, we can make it even more useful to the grower by integrating multiple data points within a farming operation."

Smith says Valley is working on partnerships with industry-leading agronomy service providers, equipment manufacturers and seed companies.

"In fact, if one of our customers has a recommendation or a request for an integration partnership, they can contact me at **andy.smith@valmont.com**. I will do my best to work with them," says Smith.

"We start all but one of our pivots at the pivot point itself, but then we do everything else on WagNet," he says. "We can turn end guns on and off, and we can keep track of everything so easily. We don't have to drive out and make the circuit to check our pivots as we have in the past."

Arneal's son-in-law, Chris Armstrong, farms with him outside of North Bend, Neb. Armstrong likes the fact that he and Arneal didn't have to upgrade all their mechanical panels to take advantage of everything AgSense offers.

- "A great benefit to upgrading is that I don't have to get into the panel itself to make changes now," Armstrong says. "All it takes is for me to get on WagNet and make stops or any other changes.
- "I also set it so I'll receive texts when the pivot stops or the power goes out. We've had the pivot stop a few times before and I didn't notice it for a couple of hours. The sooner I know, the sooner I can do something about it."
- Just down the road, Maynard Flamme doesn't have to leave home in the middle of the night to check on his pivots anymore. He gets on his tablet or computer to check on his pivots and corners any time of day.
- "The yearly subscription is really reasonable," says Flamme, "and it's so easy to use. It shows where my pivots are instantly. I can just click on, look at it and go back to bed."
- More choice. More technology. More freedom. That's how Valley and AgSense are bettering the lives of their growers.

To find out more about remote monitoring and control opportunities, contact your Valley dealer or visit **valleyirrigation.com**.

Valley Dealers Excel, and

Valley dealers are known for superior products and customer service, and Valley recognizes the most successful with high honors, awarding them with Performance, Performance Plus and Premier dealer status. While that's all well and good, how does it benefit the customer?

J.W. Kerns Klamath Falls, Ore.

Dan Nygren, owner of J. W. Kerns in Klamath Falls, Ore., is a Performance Plus dealer. He says that while it's nice to have the award on the wall, that's not really what it's all about.

"It holds us to a higher standard," he explains. "We are required to implement ideas from Valley, which are very valuable. Until we started putting those recommendations in place, we didn't know just how well they would work, but I think our customers appreciate us being held to higher standards."

And they do. Customer Scott Balin says his family has worked with J. W. Kerns since they opened for business and for good reason.

"They are Johnny-on-the-spot when it comes to service," he says, "especially on our older machines.

"They're all nice guys and really supportive. They're also very competitive for pricing. Of course I shop around when it comes to big purchases, but between their service and their pricing, they get my business."

Western Sprinklers Colby, Kan.

"...between their service and their pricing, they get my business."

- Scott Balin, Customer

Max Bell is the owner of Western Sprinklers in Colby, Kan., another Performance Plus dealer. He says he works in a pretty mature market, and has had most of his customers for more than 40 years.

One of those customers is Mitchell Baalman of FDK Partnership. His father started working with Western Sprinklers very early on. Baalman is using his irrigation equipment as part of an effort to extend the life of the Ogallala Aquifer.

"We want to make sure our kids have a water supply, too," says Baalman. "The guys at Western Sprinklers understand our business model. We've got a great rapport. I'm glad we have them on our side.

"We can do a lot of service ourselves, but when we need professionals, the guys at Western Sprinklers get out here that day. We know it's going to be done right and that's the main thing."

"We know it's going to be done right and that's the main thing."

- Mitchell Baalman, Customer

Customers Benefit

Quality Irrigation Yuma, Colo.

Quality Irrigation in Yuma, Colo., is a consistent Performance Plus dealer. General Manager Daryl Bowin and Operations Manager Alex Beauprez say the Valley standards for award-winning dealers cover everything from the way the dealership is physically set up to their technicians' yearly service training.

Bowin says, "Valley sets the bar high, and we take it seriously here. It's just what a good dealer should do."

"Quality is more than just a name on the door," Beauprez adds. "It's the way we do business."

"Quality is more than just a name on the door. It's the way we do business."

- Alex Beauprez, Quality Irrigation

Taking Service a Step Further

Quality Irrigation began a winter preventive maintenance program to keep its customers' equipment running more smoothly year round. Techs service between 350 and 400 pivots each year, and get very few service calls on equipment serviced during the off-season.

"We keep our guys busy all year round, and it has made us more effective in providing service in the summer," says Bowin. "Our customers love it."

Valley Irrigation of Greeley Greeley, Colo.

"You can't take your customers for granted."

Valley Irrigation of Greeley

- Vic Fiscus,

At Valley Irrigation of Greeley, a Performance Plus dealership in Greeley, Colo., Vic Fiscus says customer relationships are like a marriage.

"You've got to work at it every day, and we treat our customers like we'd want to be treated," he says. "You can't take your customers for granted!"

Jack Larson started working with Valley Irrigation of Greeley back in the 80s, and while he calls on them for all the usual service issues, he says the dealership really comes through in a crunch.

"We had a couple of pivots flip over from wind and some twisters, and Valley Irrigation sent a crew out right away," Larson says. "They got us going in two days, and, of course, they were handling a lot of service calls at that time. They are extremely good at that."

Fiscus explains that when customers need service, they want it right away.

"That's a big focus for us," he says. "It's an important part of any business, but especially this one."

APRIL 2015



This article was contributed by Diversified Financial Services, LLC.

Diversified Financial Services has been providing retail financing and insurance for Valley customers for more than 45 years and has been the leader in the irrigation finance industry since the company was created in 1969. Diversified has financed and insured more irrigation machines than anyone else in the United States because its products and services are tailored to meet the unique needs of every customer.

Driven by relationships with its customers, Diversified takes a different approach to the credit application process, using dedicated relationship managers to work on every transaction. Working directly with the customer or with the customer's accountant, the relationship managers work to customize a finance program that fits each situation.

Diversified understands that not all finance transactions are the same, which is why it offers a variety of products such as contracts, leases, zero down and delayed-payment options. As the only Valley authorized finance provider, Diversified is able to offer rates as low as 1.45 percent for three years, 2.59 percent for five years and 3.40 percent for seven years.



Photo courtesy of The Kearney Hub and Lori Potter

Diversified Agrisurance provides physical damage insurance as an overall solution to customer needs. As a Diversified affiliate company, Diversified Agrisurance has been a leader in the irrigation insurance marketplace for more than 40 years and this experience has allowed it to become the single largest insurer of self-propelled irrigation equipment in the nation.

Diversified Agrisurance has the most comprehensive physical damage insurance product in the industry, offering a Replacement Cost Coverage policy that covers a variety of perils on irrigation machines up to 35 years old. It also provides coverage for sudden structural damage to irrigation equipment caused by or resulting from a mechanical or electrical failure. This coverage is available for qualifying irrigation units less than 20 years old.

Diversified Agrisurance has the fastest claim service in the industry because the Valley dealer serves as the claims adjuster, which speeds up the process. In 2014, when heavy storm activity wreaked havoc on pivots throughout the U.S., customers with Diversified Agrisurance were up and running sooner because they didn't have to wait for an outside adjuster to inspect the damage.

The many years of experience specializing in irrigation finance and insurance have given Diversified the ability to recognize and meet the needs of every operation. It's just another example of why Diversified is known for being a relationship-driven company.

Contact Diversified Financial and Diversified Agrisurance to customize a program for your next Valley purchase. www.dfsfin.com

Valley Water Management YOUR SOURCE FOR WATER SUPPLY DEMANDS

The best irrigation equipment in the world won't make a bit of difference if there's no water to supply it.

That's where Valley Water Management (VWM) comes in. With more restrictions and looming water shortages in parts of the country, VWM is identifying new water sources, finding ways to use secondary sources and managing water rights issues. It's also designing more efficient irrigation and water supply installations, including proper establishment of well placement.

"We're not just designing pumping stations," VWM president Steel Maloney says. "We're exploring water sources and efficiencies we never have before."

"VWM has hydrologists, engineers, agronomists, soil scientists, crop advisors, geologists and other technical specialists on staff," Maloney says. "We want to be able to address all water issues that our customers come across so they can overcome any hurdles they encounter."

VWM is also working with farmers and companies even before land is purchased to determine water supply options, quality and sustainability.

One such company is GMO Renewable Resources (GMORR), a group that invests in land, improves it for better productivity and leases it to growers. GMORR agriculturalist Jed Waddell, who has a doctorate in soil physics from the University of Minnesota, is currently working with VWM and Valley dealer Carolina Irrigation Solutions in South Carolina on recently purchased land.

"We saw an opportunity to acquire some land in South Carolina and we needed to complete our due diligence," Waddell explains. "Our goal was to ensure there was sufficient water and that we could get that water to the irrigation equipment. It proved to be a good situation and viable source, so we went ahead with the purchase."

VWM reviewed the land tracts before the purchase, and GMORR prepared the fields, drilling three wells and installing three pivots.

"We have a small partial circle and a small circle, each with a well at the center," Waddell says. "Then we've got a huge pivot that's about half a mile long that covers around 400 acres. That has a well, too, but we still need to route water about 3,000 feet from the other two wells to that one."

Each well is 12 inches wide and 800 feet deep, with static water levels starting at about 90 feet. Waddell believes the water supply should be sustainable for many years.

"We have the land leased to a farmer who plans to plant this spring," he says. "Carolina Irrigation Solutions and VWM are working really hard to get everything ready before then."



Maloney says Valley Water Management also worked with Waddell to assess options for irrigation on another tract of land.

"There was already a system design proposed, but they wanted us to optimize the layout, so they could get the most irrigated acres for the lowest price possible, considering all costs," Maloney explains.

"It's good to have that combination of services, with irrigation equipment and well design," says Waddell. "It's a great value for the customer."

Water supply strategies VWM explores:

- Multiple wells smarter placement, design and positioning can provide greater efficiency.
- Surface water usage integrated pump stations activate as water levels in streams, reservoirs and rivers reach certain levels.
- Secondary sources exploring lower quality water sources such as wastewater, runoff, stormwater and tile drainage water can provide significant sustainability.

2015 PRODUCT Spotlight

GPS Single Frequency Guidance

Valley Irrigation recently launched another advanced guidance option – a single frequency, dual-constellation system for corner machines. It can be retrofitted to nearly any Valley corner, and it's available as an option on Valley Precision Corners[®] and VFlex[™] Corners.

John Kastl, Valley equipment product manager, says that while GPS Single Frequency RTK Guidance costs about the same as a traditional wired guidance system, it offers track-on-track accuracy during a growing season.

"Valley guidance systems communicate with GPS and GLONASS satellite constellations – twice as many satellites as the competition," Kastl says. "There's redundancy built in, and in turn it becomes a more reliable choice."

The reference station is included in the cost of the guidance system, and there is no annual subscription required. Growers may already be familiar with the RTK Trimble[®] receiver, as it's the same technology used on many of today's tractors.



"The GPS Single Frequency Guidance is a great option for machines that are on rented ground because the entire corner guidance hardware is right on the machine," says Kastl. "The grower hasn't buried part of the investment in the ground, so if he ever wants to move the corner to a different field, he won't need to pay to bury wire again. All that's needed is to reprogram the guidance path in the GPS computer for the new field."

According to Kastl, another area where GPS guidance makes sense is when the field has underground features that make it difficult to bury the wire. "For example, it's a great colution if a grouper worth to put a generation of field with drain

it's a great solution if a grower wants to put a corner on a field with drain tile, shallow rock formations, power lines or underground gas pipelines."

If you're looking for extreme versatility with greater precision, take a look at the GPS Single Frequency Guidance from Valley.



GPS Position

GPS Position is a reliable, accurate and costeffective way to add more precision to irrigation. It's available for any computerized panel, and it's a pretty easy upgrade, according to Valley Advanced Technology Product Manager John Campbell.

- "It shows the grower where the last span is, rather than the first one," Campbell explains. "It's excellent when true accuracy is needed for end gun control, part circle machines and when using Variable Rate Irrigation."
- Cecil Schriner, a Central Valley Irrigation customer, grows corn and beans in south central Nebraska and uses GPS Position primarily for end gun control.
- "I now have it on six pivots and it gives me consistent control so I know exactly when my end guns and overhang nozzles need to shut off, so I don't water the road," Schriner says.
- "It saves me a lot of trips out to the field when I'm chemigating or fertigating, too. GPS Position gives me added versatility, that's for sure."

What do Valley Values Mean to Growers?

Reliability

Advanced

Durability

Responsiveness

Precision



Technology

Valley Irrigation is built on five pillars of Valley Value that are the backbone of the company: reliability, durability, advanced technology, responsiveness and precision.

But what does that mean to the growers working in the field day in and day out? Simply put, the Valley Value means growers get the best equipment and the most value for their money.

Let's focus on two of those values - reliability and durability. If you've ever owned Valley equipment or worked with a Valley dealer, you know those aren't empty words or promises. From the workhorse, Made in the USA Valley Gearbox to the trusting relationships dealers build, growers know that everything about Valley is dependable.

Valley Vice President of Global Marketing Matt Ondrejko says, "Reliability is not a label that can just be slapped on a product, it has to be earned. Reliability is something gained by days and years in the field, performing at an expected high-level every time."

Obviously, irrigation equipment needs to run, and run well.

"Our products are engineered, tested and manufactured to be solid and are built to last," says John Kastl, Valley equipment product manager. "Even so, we are continually looking for ways to improve the engineered design. We sweat the details, adjusting and adapting to ensure every ounce of performance is a gain for our growers."

That reliability is evident in Valley products, but it also goes beyond the machines. As Blake Reid of Reid Brothers Irrigation in Unadilla, Ga., says, "It's easy for me to sell Valley products, because I believe in them.

"Our family used Valley when we were farming. But our customers aren't just paying for steel and equipment. They're buying the service that goes with it. They're buying the reputation of Reid Brothers. A reputation we've worked hard to build."

Blake's uncle, Jim Reid of Reid Brothers in Americus, Ga., agrees completely.

"The ones who do business with us appreciate the quality of Valley and our service," Jim Reid says. "We've built a reputation of quality. We're very picky as we'd expect nothing less for ourselves, so why would we for others?"

It's not unusual for a Valley pivot to be passed on from one generation to the next, and that's a real source of pride.

"The durability of a Valley pivot is known throughout the world," says Ondrejko. "That durability is a key reason why the majority of irrigators continue to buy and recommend Valley machines to their friends and neighbors. Our customers work hard and have grit and they expect nothing less of their equipment. Valley delivers on that expectation."

> Scott Polzin of North Central Irrigation in Plainfield, Wis., says that Valley machines last a long time.

"There are some around here that still have their pivots from the 80s," Polzin says. "That alone shows how well built and constructed the machine is.

"People are glad to have Valley products, because they don't need as much repair. But they also recognize that it's the service that keeps them running so long. It's that combination that makes Valley the industry's finest."

"Reliability and durability are hard to measure, but growers can count on Valley irrigation equipment to work at critical moments in the growth cycle, and that can make all the difference when it comes to yield," Kastl says. "It's why reliability and durability are part of our cornerstone and why it means so much to us and to our customers."

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(Continued from "What do Valley Values Mean to Growers")

The Valley Gearbox

The Epitome of Reliability and Durability

There is no comparison to the Made in the USA Valley Gearbox. It's the heart and soul of any center pivot.

Dale White, gearbox department lead at the production facility in Valley, Neb., says the Valley Gearbox works because everything fits together right.

"Every part is tested for tolerance," he explains. "But it's not just the machines that work well together. It's our people. Our production engineer works hard for us, and all the people who build the gearboxes take great pride in their craftsmanship."



That's one reason so many Valley Gearboxes are still out working hard in the fields after so many years – on Valley machines and on other brands, too.

Blake Reid of Reid Brothers Irrigation in Georgia says he has replaced gearboxes on many brands of pivots.

"A lot of those 20-plus-year-old Valley pivots still have the original gearboxes on them, and they're running strong," Reid says. "But many other brands have gearboxes that aren't made in the U.S., and there's something to be said about that and the relationship to the American farmer.

"When it's time to replace, growers usually choose the American-made, Valley 8000 series gearboxes. It's the premium gearbox, and farmers understand the value of a reliable workhorse in the growing season."