

556 lbs of cement is used per person per year to make roads, sidewalks, bridges, buildings, schools, and houses.

85,000 tons of aggregates are necessary to construct 1 mile of a 4-lane highway.

9,002 lbs of stone are used per person per year for roads, buildings, bridges, and landscaping.

15,000 tons of aggregates are needed to construct a typical school or hospital.

152 lbs of clays are used per person per year for floor and wall tile, dinnerware, kitty litter, paper, and tennis court surfaces.


As a growing design trend, Green Roof technology can reduce summer cooling demands by up to **90%.**

Constructing a new home uses an average of **120 tons** of aggregates.



LUCK COMPANIES™
IGNITING HUMAN POTENTIAL

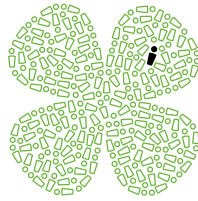
IMPACT 20
SUSTAINABILITY REPORT 14



Impact provides information about sustainability, growth, leadership, and the successful business practices of recent Luck Companies projects. In this report, you'll learn more about the work our company is doing to make a positive impact to ensure a prosperous future for society, the environment, and the economy.

Impact includes sustainability data for the 2014 fiscal year. Our goal is for this report to engage our community in an open dialogue on sustainability best practices at Luck Companies and to educate our associates and stakeholders on how those practices lead to business success for us and our customers.

Commitment, one of the core values of Luck Companies, builds the long-term success of associates, customers, and communities. We demonstrate our commitment by focusing on people and implementing projects that will benefit our community for decades to come.



LUCK COMPANIES™

IGNITING HUMAN POTENTIAL

We will ignite human
potential through
Values Based Leadership
and positively impact
the lives of others
around the world.



Try Sreng is a Surface Miner III and has been a Luck Stone associate for 26 years.

“

If you do right by
your people, they'll
do right by you.

”

– Charles Luck, Jr.

Table of Contents

Company Profile	5
Luck Companies Message	7
Values Based Leadership.....	9
How People Can Sustain and Grow a Company	9
How VBL Works	11
Values, Objectives, and Metrics.....	14
Taking VBL to a Larger Community	15
Planning for the Future	17
Bull Run Expansion	20
Strengthening Sustainability Through Growth.....	20
Remote Control	23
Applications and Innovations	25
Har-Tru Sports	27
Teaching the Next Generation	31
Community Activity	32
2014 Recognition.....	33
2014 Luck Foundation Grant Recipients	35
Water Banking.....	37
Preparing for a Not-So-Rainy Day	37
From River to Reservoir	39
Maintaining Reserves	41
The Growth of Luck Ecosystems	43
Luck Stone Center.....	47
Reaching Out.....	49
Safety	51
Safety and Health Regulatory Requirements	53
Occupational Health	54
Summary Data.....	55
Mining 101	57



LUCK COMPANIES™

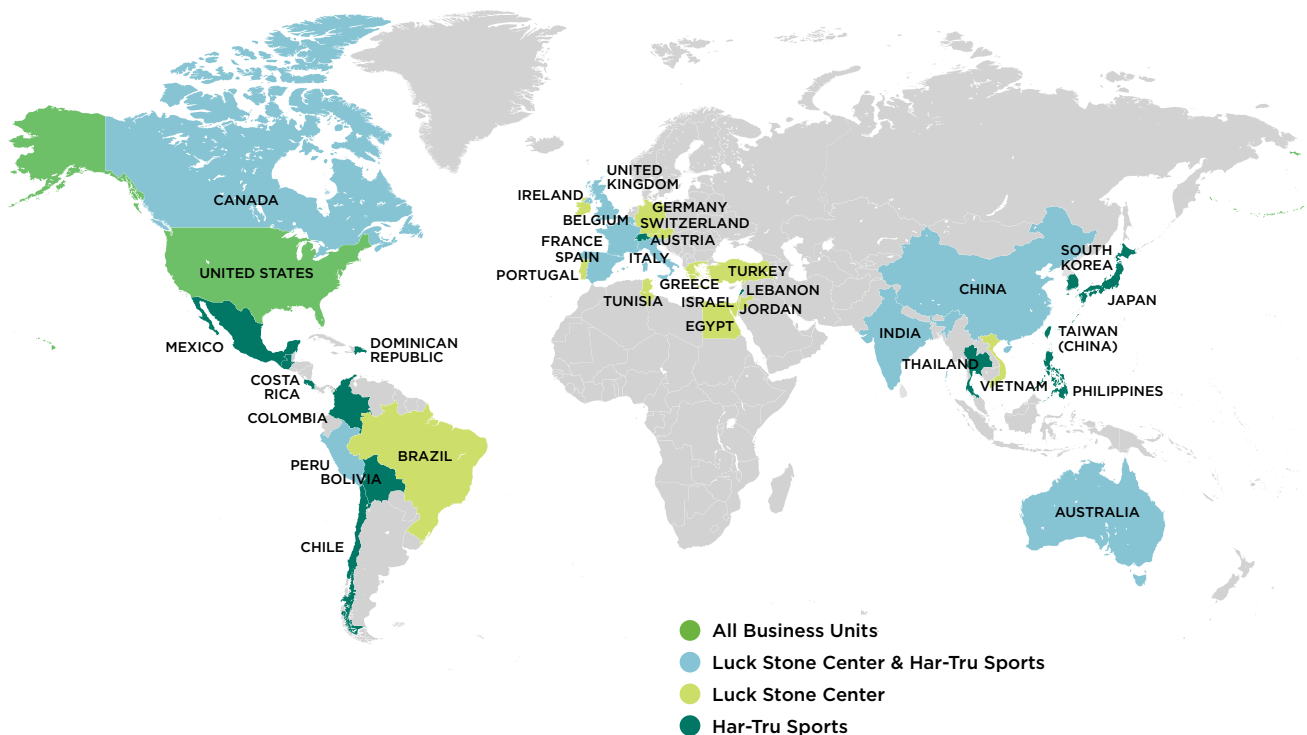
IGNITING HUMAN POTENTIAL

Headquartered in Richmond, Virginia, Luck Companies is a privately held company composed of four distinct business divisions:

Luck Stone, one of the largest producers of crushed stone in the nation; Luck Stone Center, a leading architectural stone supplier with a global sales and distribution presence and locations across the mid-Atlantic region; and Har-Tru Sports, the leading provider of clay courts and court accessories in the tennis industry. Additionally, Luck Development Partners (LDP), an affiliate of Luck Companies, integrates and highlights natural, historical, and environmental elements into the design of its real estate projects.

Visit luckcompanies.com for more information.

Market Map





Luck Stone, the largest business unit, is Luck Companies' core business, with more than 90 years of expertise. Luck Stone operates 20 locations in Virginia and North Carolina that supply a wide range of products, including crushed stone, sand and gravel, topsoil, and ball field mixes to customers throughout the mid-Atlantic. Luck Stone's vision is to be the model of a customer-inspired business that builds enduring value for its partners. New business concepts include Luck Ecosystems, which transforms raw materials into performance media to optimize sports field play surfaces, support organic plant growth, and naturally filter stormwater. The company is dedicated to maintaining a safe and environmentally conscious workplace in addition to a longstanding commitment to the sustainability of the communities in which it operates.

luckstone.com



Luck Stone Center is a leading architectural stone supplier with a global sales and distribution presence and locations across the mid-Atlantic region. Luck Stone Center services builders and developers through consultation and the sale of distinctive natural stone products. Luck Stone Center recognizes its responsibility to make certain that the excavation, transportation, and labor related to the products that it imports from around the globe are socially responsible and consistent with its environmental ethic.

luckstonecenter.com



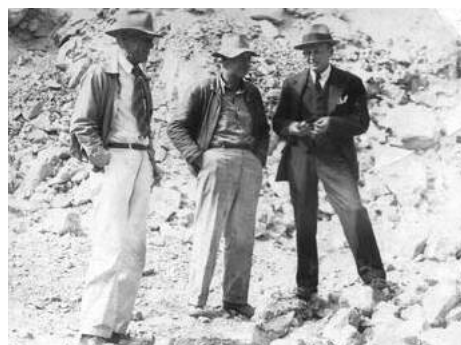
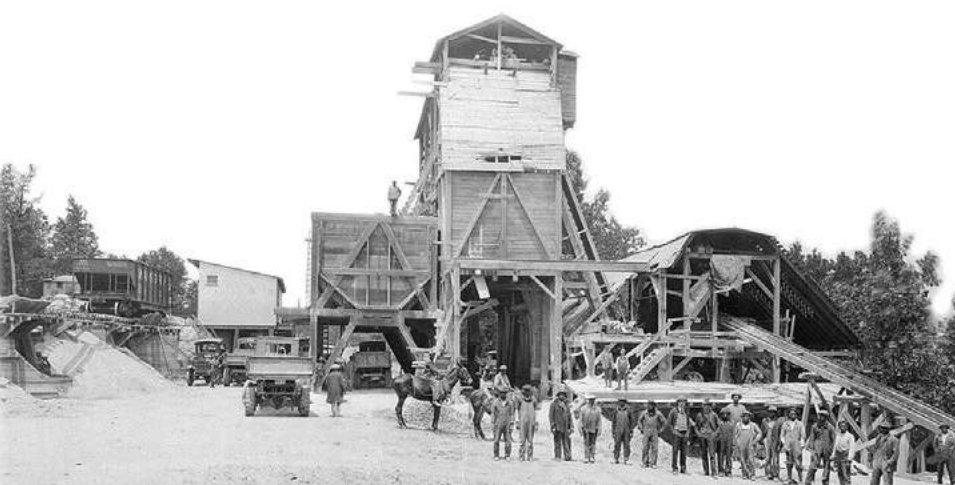
Har-Tru Sports, based in Charlottesville, Virginia, is the leading provider of clay surfaces and court accessories in the tennis industry. Har-Tru Sports, best known for its Har-Tru brand of clay courts, uses its products and product knowledge to further the development of the game of tennis and tennis champions around the world. The company's global expansion now includes courts in Australia and China, and it continues to focus on innovative green technology to provide world-class products.

hartru.com



An affiliate of Luck Companies, Luck Development Partners (LDP) is guided by a commitment to integrate history, culture, and landscape to build a legacy for the future. LDP aspires to create high-quality places to live, work, learn, and play in a way that is environmentally and socially responsible.

lucklegacy.com



**We've been in
the aggregate
business for
over 90 years.**

Throughout this time, our family business has grown from one quarry site, established by my grandfather in Richmond, Virginia in 1923, to four distinct business divisions (Luck Stone, Luck Stone Center, Har-Tru Sports, and Luck Development Partners) occupying territories and markets throughout the mid-Atlantic region.



Charles Luck, Jr.

We've experienced a variety of economic changes and development opportunities throughout the years, and what we know is that every decision we make has an impact on our people, our communities, and our collective future.

At Luck Companies, our values (Leadership, Integrity, Commitment, and Creativity) and our mission to Ignite Human Potential are more than cultural expectations; they are principles of the way we do business. We believe that it is our responsibility to ensure that we operate our business in ways that positively impact people and the communities we serve.

Sustainability is deeply rooted in our company's 92-year history and critical in our industry; we hold ourselves accountable by planning for the evolution of our sites, the welfare of the environment, and the safety and prosperity of our associates and our communities. As we continue to grow our business, connect with our customers, form new partnerships, broaden our stakeholder reach, and contribute to our communities, we are approaching our endeavors with care. In 2014, we established a Growth Team charged with creating a broader footprint, more opportunities for associates, and a positive impact for stakeholders. We also introduced our strategic vision through the year 2020—an initiative designed to prepare our organization for the future.

In this year's report, you'll learn more about the work we've done throughout 2014 to support our company's sustainability goals. Our hope is to engage our community in an open dialogue around sustainability best practices and the work we're doing at Luck Companies to model our mission, honor our values, and do everything we can to benefit others for decades to come.

Thank you for supporting Luck Companies. Our partnership is paramount in achieving lasting, positive results through sustainability initiatives.

Sincerely,

Charlie Luck, IV



Values Based Leadership

How People Can Sustain and Grow a Company



INTEGRITY

Family history

More than 90 years ago, **Charles Luck, Jr.** founded Luck Companies with a simple yet powerful philosophy: “If you do right by your people, they will do right by you.” Mr. Luck didn’t just say those words, he lived them. During the Great Depression in the 1920s, upon noticing that his employees hadn’t been eating well, Mr. Luck converted a rail car into a kitchen and began serving his associates a hot breakfast every morning, paying for it out of his own pocket. That set the foundation for a culture of prioritizing and caring for people that rippled throughout the organization.

His son, **Charles Luck, III**, continued that tradition and reinterpreted those family values for his time. In an era of command and control leadership, he adopted the phrase “we care” and placed it on trucks, signs, and collateral throughout the organization. Like his father, people were always his first priority. During his time as CEO, Mr. Luck made it a point to visit and personally shake the hands of every one of his associates at every site, every year—asking them, “How are you? How is your family?”

When **Charles Luck, IV** became the CEO he pushed the foundation set by his family even further, creating the company’s current mission: “We will ignite human potential through Values Based Leadership and positively impact the lives of others around the world.” Now in its 12th year, Values Based Leadership (VBL) has been integral to the success of Luck Companies. With the implementation of VBL, Luck Companies has developed a scalable business and culture where people come first and associates perform in roles that invigorate their purpose, passions, and competencies. In the words of Luck’s business proposition, doing good to do well.

Luck Companies describes VBL as living, working, and leading in alignment with your personal core values, principles, beliefs, and purpose to, in turn, ignite the extraordinary potential in those around you. At its core, the philosophy is about understanding who you are (values, principles, beliefs, and purpose) and becoming the best version of yourself so you can help others do the same (leadership). Luck believes in the extraordinary potential of all people, and that conscious leadership makes a positive difference in the lives of others, regardless of title or position.

In a company of more than 850 people that conducts business around the globe, putting that mission into action takes hard work and a deep awareness of intentions and desired outcomes.



“At Luck Companies, we believe leadership is a choice, not a title or position,” said Mark Fernandes, Chief Leadership Officer.


“It’s a conscious choice to work first on yourself so you can, in turn, ignite the extraordinary potential in those around you.”

Given this, leadership training and development occurs at every level of the organization and intensifies as responsibilities expand. The work to actualize the full potential of associates is enhanced with additional education and programming around business acumen, technical skills, and compliance requirements.

“We believe the best way to develop the unique talents and abilities of our associates is through a

culture rich in feedback, focused on engaging and enabling them as they pursue their career dreams and aspirations,” said Fernandes. “In addition to ongoing feedback, we provide development through on-the-job experiences, coaching, work with subject-matter experts, and hands-on classroom experiences.”

“Training is not enough to ignite human potential; it requires a fierce commitment to developing the whole person—understanding values, teaching technical skills, discovering leadership style, and realizing dreams, purpose, passion, and spirit. It requires consistent reflection, dialogue, feedback, and conscious choice for all involved, as well as an unwavering commitment from the associates’ leaders to their future success,” Fernandes explained.



As Luck Companies evolves and prepares for the next 90-plus years in business, VBL's positive impact on others will continue to grow with it. What began as a way to define a culture has become an avenue to help people reach their true potential.

Luck Companies is guided by a sincere desire to create opportunities for associates. In the coming Vision 2020 strategic cycle, the goal is for associates to intersect their purpose with their passions and competencies to, in turn, make a difference in their own lives and the lives of others.

Over the course of 92 years of growth and change, Charles Luck, Jr.'s philosophy—"if you do right by your people, they will do right by you"—continues to define the character and culture of Luck Companies and to empower associates, customers, and communities alike.

LUCK COMPANIES VALUES

► COMMITMENT

Takes personal responsibility for the success of self, others, and the organization

- Model safety, health, and environmental stewardship
- Do what it takes
- Pursue excellence
- Celebrate success

► INTEGRITY

Earns the trust and respect of others

- Be honest
- Do what you say
- Hold self and others accountable
- Give and receive feedback

► CREATIVITY

Delivers ideas and innovation that add value

- Be curious
- Learn new skills
- Be open to change
- Explore and experiment

► LEADERSHIP

Ignites human potential and performance

- Value diversity and difference
- Develop self and others
- Inspire confidence and optimism
- Confront issues

Values, Objectives, and Metrics

The values that inform “doing good” are well-known to all Luck Companies associates. Before being hired, in order to ensure alignment between the individual and the organization, each person is provided a copy of Luck’s deeply held beliefs about what is right and good to the company:

commitment, integrity, creativity, and leadership.

Those core values give rise to company-wide objectives, which are refreshed every five years.

In the upcoming cycle, Luck Companies’ objectives include:

advancing the core mission

+

focusing on leadership development and succession

+

continuing a focus on business excellence

+

and generating growth in four key financial metrics by the end of the period.

To analyze the success of VBL, metrics are measured regularly by means of the VBL 360° assessment process, emotional competency inventories, whiteboards, the 9-box group process, and Hay Group’s annual associate engagement survey.

Luck Companies is expanding these metrics beyond their formal leaders so that the data can potentially be used to inform leadership succession choices. “We have 850 associates, and we’re trying to develop 850 leaders,” Fernandes says. “In that workforce is an individual contributor who can run this company someday.”

LUCK COMPANIES PERFORMANCE ASSESSMENTS

- **Associate Engagement Survey (AES)**
Assessed by The Hay Group enterprise wide on an annual basis. All formal leaders with five or more direct reports, all business units and functional support groups, and the organization as a whole are broken out with their own reports.
- **Values Based Leadership 360s**
All formal leaders are assessed against five Leadership Competencies and 15 corresponding attributes on an annual basis by their boss, peers, and direct reports.
- **Annual Reviews**
All associates are formally reviewed on an annual basis. The expectation is that these reviews are a replay of the feedback that has been occurring throughout the year. There should be no surprises and their base pay is adjusted based on a points system.
- **Values Based Leadership Index (VBLI)**
This is tallied on an annual basis for all formal leaders from Front Line Supervisors to the C-Suite. It’s comprised of the leader’s Team AES score, their VBL 360 score, and the job performance section of the Annual Performance review.
- **Consolidated Incentive Program**
All associates participate in an annual incentive plan that is tied 100% to the financial performance of the company and their respective business units.
- **Values Based Leadership Bonus Program**
This is the most coveted bonus program in the company, as the winners are nominated by their peers. Fifty hourly associates receive a \$2,500 bonus for being champions of the company values. An additional 25 salaried associates are nominated by their co-workers for the same criteria and receive a \$5,000 check.
- **Luck Companies** also uses a selection of other assessment tools as needed for Self and Leadership Development which include Hay Group’s Emotional Intelligence, Climate, Styles, and Values and Motives instruments, The Leadership Circle Profile, and the Leadership Practices Index from Kouzes and Posner.

Taking VBL to a Larger Community

To bring the mission to life outside the company walls, Luck brings Values Based Leadership concepts and implementation to more than 70 other companies directly.

In addition, nearly 10,000 people worldwide are using Luck's VBL app—**igniter**—to understand and maximize their potential. By combining those channels with social media, traditional media outlets, speaking, facilitating, and a heavy emphasis on customer service, VBL has become a hallmark of Luck Companies' growth, prosperity, and global impact.

"Partnership with Luck Companies has been instrumental in the success of our organization," said Dr. James Lane, Superintendent of the Goochland County Public Schools. "Mark Fernandes has trained the entire team on VBL. It has become a core part of our strategic 7-year plan, our general philosophy of leadership, and inspired our whole organization for the better. He worked directly with the leadership team, and with every teacher in the district. As a convocation speaker, he has reached every employee, and as our commencement speaker reached our students as well."

Bryan Smith, Mine Development And Blasting Manager at Luck Stone, also carries the values of commitment, leadership, creativity, and innovation to the Goochland schools. He leads their career and technology education advisory team and is a lead partner in determining the future of technical education for that system. His work has helped spark a renaissance in Career Technical Education (CTE) over the past 3 years; Goochland now offers CTE in 16 specialty areas, including heavy equipment operations, JROTC, carpentry and building trades, agriculture, robotics, culinary studies, and even 3-D printing.

"The heavy equipment program is a 'mini civil engineering' program," said Lane. "It's a core component of our offerings and I don't think we'd be where we are today without Luck Companies' and Bryan's leadership. In addition, we successfully applied for a \$1.5 million capital investment grant from the county to make the improved CTE happen—and that's also due to a great deal of help from Luck."

AND BRINGING IT BACK HOME

As Chief Family Officer, Wanda Ortwine leads the Family Office, which supports a multi-generational family and Luck Companies in achieving their vision for the next generation. The Family Office is focused on long-term financial sustainability through thoughtful and comprehensive business ownership and leadership succession plans, estate and tax planning, asset protection, investment strategies, and diversification. One of her key objectives is to preserve Luck's values and business interests from generation to generation and build for the future by counseling, educating, and preparing the next generation of Lucks for ownership and leadership of a national company.

"Working at Luck Companies and with the Luck family has been life changing," said Ortwine. "Learning to understand myself at a deep and meaningful level has allowed me to change my own behaviors and decision-making in alignment with my personal core values. Through this process, I've had some of the most profound watershed moments around my leadership. Today, I am living and leading in a role that honors my passions and exceeds my wildest dreams."

"I believe igniting family potential and building leadership capacity in a family gives us the greatest chance to change the world—especially given that family businesses represent about two-thirds of all businesses around the world and contribute in excess of 70% to GDP," said Ortwine. "For the Luck Family, Values Based Leadership has been integral in transitioning between generations and is the foundation for building and maintaining our rich and rewarding relationships, steeped in sincerity, transparency, and vulnerability both inside and outside our company walls."



Download the **igniter** app at
<http://igniter.valuesbasedleader.com>



IHP AWARD PROGRAM

Launched as a peer-to-peer program, the Igniting Human Potential (IHP) Award program (now known as the Charles S. Luck, III, IHP Award) honored John Hellyer as its biennial recipient in 2013. This award recognizes an associate who goes above and beyond in embodying company values, ensuring the success of others, inspiring those around them, and making a positive impact both inside and outside the organization. It is considered among the most prestigious awards in the company.

“One of the most inspiring experiences that I had in 2013 was when I was selected for the IHP Award,” said Hellyer. “It encouraged me to continue to serve others, build relationships based on trust, and do all that I could to Ignite Human Potential around me.”

John has been with the company for 15 years and currently serves as a Senior Technical Sales Support Specialist for the Luck Stone business unit. Among customers, associates, family members, and local community members alike, he has a reputation for his noble character and unwavering commitment to helping those around him thrive.

LEADERSHIP RECOGNITION

As a result of his work to take Luck Companies' VBL message global, Mark Fernandes was recently selected by *Inc.* magazine as one of the 100 Top Great Leadership Speakers. He is also a two-time recipient of Trust Across America's Top 100 Thought Leaders in Trustworthy Business for 2014 and 2015. Additional honors include being named as a Switch and Shift Top 75 Human Business Champion and member of their League of Extraordinary Thinkers.

MEDIA IMPRESSIONS

igniter Usage

- **9,800** downloads
- **94** countries

Twitter Usage

- **352** Twitter lists
- **13,605** Twitter followers
- **123** countries represented

LinkedIn Usage

- **3,003** followers
- **1,380** endorsements
- More than **23 million** impressions

Total Media Impressions

More than
45 million

Planning for the Future



The population of Northern Virginia is growing.

There are more than 2.7 million people living in the area—and with more people come more buildings, roads, and construction of all kinds. At some point, all of that infrastructure relies on the material that Luck Stone provides.

In fact, Luck Stone has been operating at its Fairfax Plant since 1930. For 85 years, the plant's crushed stone has helped build this dynamic community. It was the company's first quarry outside of the Richmond market. Now, it's a symbol of the long-standing commitment Luck Companies has to Northern Virginia, its people, and the businesses that serve them both.

But quarries don't last forever, even a large and productive one like the operation at Fairfax.

continued »



Increasing available reserves

But with the quarry at Fairfax approaching the century mark, Luck Stone decided to look for a replacement before the reserves reach an end. They asked some tough questions: How else can

As the reserves at the Fairfax Plant began to come to an end, Luck Stone asked some tough questions.

we continue to supply a growing area with the material it needs to build? What will become of this site once

it has reached capacity? And what have we learned from 85 years of mining this quarry?

The answers were carefully researched, tested, and discussed. Ideas were sought, neighbors were consulted, experts weighed in. The primary goal was to continue providing customers with the building blocks necessary for the growth of the Northern Virginia market. In order to do that, a sustainable supply of proven reserves was needed.

Identifying a sustainable supply of high-quality aggregates requires thoughtful planning with a mix of engineering, geographic, geological, and marketing considerations: how to deploy the latest technology, what types of products best serve the needs of customers, and what methods

best benefit the environment. Equally important is finding resources that are close to the markets that need them—when it comes to hauling crushed stone, the shorter the distance the better.

Fortunately, there was another family-owned crushed stone producer near the Fairfax site. Luck Stone was given the opportunity to acquire the Bull Run Stone Company because of a long-standing relationship with its owner and his trust in the thoughtful way Luck Stone operates.

Among the many reasons for the arrangement was his belief that Luck Stone had the best chance of gaining permits for additional reserves on property adjacent to the existing quarry. That confidence was based on Luck Stone's long-term presence in Northern Virginia, commitment to environmental stewardship, dedication to the surrounding community, and solid track record of successful reserve expansions. After a detailed, collaborative and innovative permitting process, the available

An important goal was to continue providing customers with the building blocks necessary for the growth of the Northern Virginia market.

reserves at Bull Run were significantly increased and have created a long-term resource for the region.



Luck Stone Sales Associate Jay Ashley and Bruce Wilkins of Skanska USA discuss the benefits of lining stormwater channels with Luck Stone aggregate products to prevent erosion and capture sediment.

Expansion and innovation

The expansion of the Bull Run facility began in 2008 by relocating 1.3 miles of Route 659. Most recently, a new plant expansion started at Bull Run in order to increase production capabilities. In addition to providing the Northern Virginia market with a steady supply of material, one of the key components of the operation will be a base reclaim system. Base reclaim allows Luck Stone to take a low-demand, low-price product and turn it into a higher-demand, higher-priced product—all while removing fewer resources from the quarry. This process will extend the life of Bull Run and assist Luck Stone in better managing inventory.

With a new site and new products, the cycle of growth has come full circle—from helping to build the infrastructure of one of the country's fastest developing regions to sustaining that region, and many others, with inventive ideas that will help people for generations to come.

BULL RUN

Strengthening Sustainability Through Growth

Production of aggregates in the U.S. went from about 351 million metric tons in 1940 to more than 2 billion metric tons in 2014

In 2014, Luck Stone broke ground on a \$40 million plant expansion at its Bull Run facility.

Working with customers, community members, and industry leaders, Luck Stone is creating a state-of-the-art operation to prepare for growth and to actively support everything that comes with it.

A key objective of the new plant is to continue to bring opportunities to the people and businesses of Northern Virginia, and to customers using the aggregate produced.

continued »

But the new facility is not only an opportunity to create a strong economic engine, it's also a chance to demonstrate the core values that define Luck Companies: commitment, creativity, leadership, and integrity.

Demonstrating those values means designing a facility from the ground up that is more efficient with less environmental impact so that it does more good—for associates, customers, neighbors, and everyone that benefits from the products. Luck Stone has a history of innovation

The facility is designed from the ground up to be more efficient with less environmental impact.

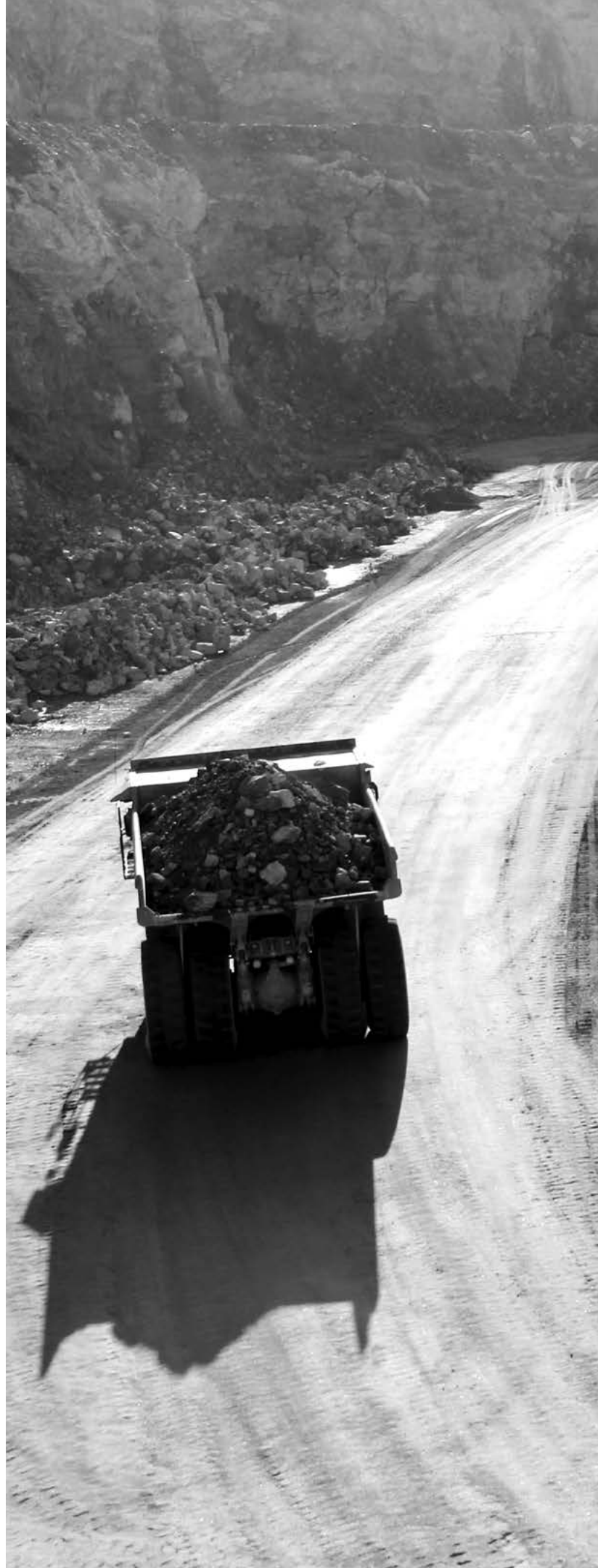
in the industry. In 1930, Luck Stone was the first quarry operator in Virginia to switch from steam-powered equipment to electric equipment.

The plant will feature new processing technology that recycles dust and turns it into a manufactured sand—reducing waste and creating products used to help plants grow, stormwater get filtered, and a wide variety of other applications. The process converts a low-demand product into a locally produced sand, reducing the need to truck in materials from long distances.

When the Bull Run expansion is complete, it will include technology to reduce noise and increase the use of recycled materials. It will rely extensively on domestic parts and retain rainwater to support operations. It will use new technologies to eliminate machinery, increase safety, and promote sustainability.

Using the latest technology available, the Bull Run facility will house a crushing operation with an automated flexible plant design. It will produce material more closely aligned with what customers need, the market demands, and the community wants—delivering the right product at the right time with as little waste as possible.

In the process, approximately 40 new jobs will be created—and additional job growth will occur when asphalt and concrete plants set up new facilities on site. The plant will also support Luck's customers, their customers' customers, and other "downstream" employment.



Sustainability has been a driving factor in the design of the Bull Run Plant. Here are some of the methods that will increase sustainability at the new plant:

The plant will use automated radial stackers to inventory product and almost eliminate the need for the trucks and loaders used today to stockpile finished product.		100% domestically sourced 100% of conveyor components—including steel, bearings, gear boxes, and idlers—were domestically sourced.	Enclosed tertiary crushers, screen stations, and sand plant reduce noise and dust exposure to neighbors.
RECYCLED STEEL		Utilize rainwater for day-to-day operations.	OPTIMIZE WATER USE
Fully automated secondary and tertiary plants.			
50–75% reduction in haul distance Reduced the haul distance to the primary plant for trucks by one half mile in each direction. This can reduce the haul distance by 50–75% and will greatly increase the operational efficiency of the plant.		The plant has a state-of-the-art base reclaim process as well as the ability to recycle dust into manufactured sand. This reduces the inventory of road base and dust and increases the amount of sand and clean stone for the market. Used to create biofiltration media and other products, the base reclaim process has opened new and sustainable markets that extend natural resources and promote growth across several industries.	
		PAVED TRAVELWAYS REDUCE DUST	
Much of the construction has been prefabricated off site and erected using bolt-together construction. This reduces the waste involved in the construction process.	Used petroleum is utilized to convert to energy to heat the maintenance shop.		Produce manufactured sand in line as part of the plant process— eliminates the need for the existing loader that feeds the sand plant being used today.
	AUTOMATION		
Wireless and radio frequency technology used in the scale office to eliminate trucks stopping at the office and leaving their trucks to idle.		A commitment was made to neighbors that would limit the size of soil storage so that it does not detract from the surrounding landscape.	
LOWER POWER CONSUMPTION		6 acres of new wetlands constructed Four acres of wetlands impacts for the quarry expansion were replaced by six acres of new wetlands construction.	
50+ acres dedicated Over 50 acres of conservation easements were dedicated to habitat preservation and land conservation.	The plant’s key travelways were paved at the entrance and exit to limit the creation of dust by truck traffic over gravel driveways.		Majority of steel used in the construction of the plant is recycled steel.
			2 BIO-RETENTION BASINS

What If We Took the Operator Out of the Loader?



Luck Stone associate Doug Kitts operates the remote-controlled pit loader at the Bull Run Plant. An advantage of the remote loader is that equipment can access areas that might be considered dangerous. Using the remote loader, an associate is not at risk of injury from a falling rock or unstable ground.

John Thompson didn't wake up thinking that he would revolutionize the way his company did business; but in the spring of 2013, that's just what he helped to do.

Aggregates are the most mined material in the world, and one of the most accessible natural resources.



The power of an idea and the people who believe in it

John was working at a Luck Stone quarry in Manassas. The plant extracts rock and aggregate and crushed minerals that have helped build some of the neighborhood's most iconic pieces of infrastructure. Over the years, millions of people traveling Route 66, or flying from Dulles Airport, or caring for a loved one at a nearby hospital are literally supported by the stone from that mine.

But the mine where John worked was getting to the end of its reserves—that is, most of the rock that could safely be mined had already been extracted—and the team at Luck Stone was making plans to finish the operation and eventually move to another location.

Deciding when to stop an operation is no small task, or one that's taken lightly. You have to consider the investment in the people who work there, like John and his associates, the customers who need material to build the things that keep the community running, the taxes that fund local schools, and a hundred other operational concerns. Getting the most out of this operation

is important to a lot of people.

On the other hand, by the time you get to the bottom of a quarry, the sides are steep and the roads to get from top to bottom are narrow. At some point, it can become dangerous for an operator to drive equipment into the deep corners of a mine. Since safety is one of the most important values of Luck Stone, taking a risk like that isn't an option.

That's what sparked John's epiphany and led him to ask a simple but powerful question: what if we took the operator out of the loader?

During his career, John had worked underground with remote-controlled equipment; but remote-controlled loaders (which are like a very large bulldozer) had never been used in an aggregate quarry before. The team at Luck Stone asked, "How can we make that happen?"

From start to finish, an initiative as significant as extending reserves or opening a new plant requires the entire team. From ideas to implementation, the whole group gets involved and intentionally researches and

analyzes the full scope of an investment like this.

Eight months and a lot of work later, the first remote-controlled loader in the aggregates industry

...the first remote-controlled loader in the aggregate industry debuted at the Bull Run facility.

debuted at the Bull Run facility. Miners operate it with a joystick. It's not exactly simple, but it's definitely safe. In fact, it's even opened the door to one day having disabled veterans employed to operate heavy machinery.

The plant at Bull Run is still operating, and it's being expanded. Nearly two million additional tons of stone have made their way out of that quarry and into the schools, roads, buildings, and communities of Northern Virginia. The same community where John Thompson wakes up every day wondering where the next big idea will come from and how the Luck Stone team can make it happen.



Innovation

at Luck Stone



Customer-inspired strategies

Luck Stone is inspired by its customers to create innovative solutions that transform challenges into opportunities that build value and make their customers more successful. Finding better ways to communicate is one example of those values in action.

Free iPads and communication apps

Beginning in 2013, Luck Stone provided nearly all of their haulers in the Virginia market with free iPads. Approximately 250 tablets were supplied.

The iPads came preloaded with the Luck Stone iOS App, which was developed in-house specifically for haulers. Another app, simply called Luck Stone, is geared to customers and is available for free on the Apple App Store.

The customer app

The Luck Stone App allows customers to request orders of stone from the field, shows them where their trucks are in real time in relation to their job site, and shows them their daily totals for jobs, orders, and POs. Customers also can use the location finder to find the nearest quarry. The app includes a tonnage calculator

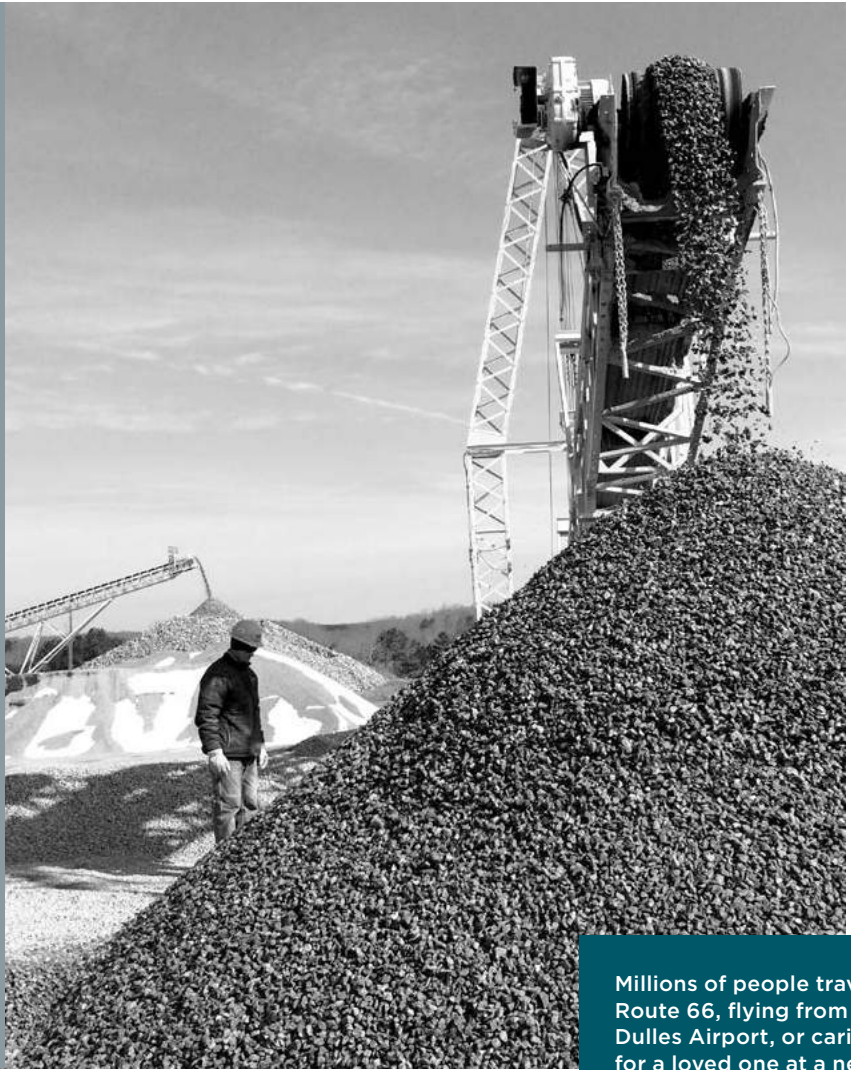
that provides an estimated tonnage needed for a project and can automatically account for the different shapes of a customer's projects.



To download the app, simply search **Luck Stone** in the App Store and look for the clover.

“At Luck Stone, we have been working diligently to create a customer-inspired culture,” said John LeGore, President of Luck Stone.

“We recognize that in today’s business environment, we have an opportunity to make a difference by utilizing technology to provide our customers with timely, accurate information.”



Millions of people traveling Route 66, flying from Dulles Airport, or caring for a loved one at a nearby hospital are supported by the aggregate from Luck Stone.

The Hauler App

The Hauler App gives truck drivers directions with real time traffic information. It streamlines communications by showing haulers their assignments, and allows for paperless transactions by capturing digital signatures. It also allows Luck Stone associates to see where the trucks are in real time in order to more efficiently conduct dispatch operations like assigning loads, back hauls, and re-routing.

RoamBI

Earlier this year, Luck Stone also launched RoamBI, a business intelligence app for iOS and Android systems that provides sales associates with greater visibility into customers' purchasing habits and needs. The interactive app provides up-to-date information and has the ability to generate and run customized reports leveraging customer databases and raw data. The result is that sales associates are equipped with intelligence that results in more strategic and meaningful customer conversations.

“Customers want to know truck and material locations, track the status of orders and purchases, and be able to order material from remote sites. These tools let them do that in real time.”

– Tori Warren, Dispatch Supervisor at Luck Stone



Har-Tru Sports is the leading provider of clay courts and court accessories in the tennis industry.

With a focus on developing champions worldwide,

Har-Tru Sports is best known for its Har-Tru brand of clay courts. The company uses its products, knowledge, advocacy, and passion to further the development of tennis champions around the world. Har-Tru's global expansion now includes courts in Australia and China and a focus on innovative green technology to provide world-class products.

BE ONE WITH THE CLAY

The “Be One with the Clay” video contest was designed to empower tennis players and enthusiasts around the world to share stories about their love for tennis, particularly playing tennis on clay courts, and how their passion has been enhanced by the power of playing and training on clay.

Har-Tru introduced the “Be One with the Clay” campaign during the Har-Tru USTA Pro Circuit Wild Card Challenge in 2014.

The top finalist videos were submitted by Luis Hernandez, Mark McIntyre, and Natalie Flinn, whose stories were posted on Har-Tru’s “Be One with the Clay” microsite so visitors could vote for their favorite player.

Mark McIntyre, Executive Director of the Riverside Clay Tennis Association and “Be One with the Clay” finalist noted, “We had a lot of fun participating in the video contest and were honored to be selected among the finalists. They were all terrific stories, deserving recognition.”

Finalist Natalie Flinn shared: “My ‘Be One with the Clay’ journey was a fantastic experience. The best thing, however, is the fact that my small club in Manchester, England, will be moving to a brand-new location and will now have three out of eight clay courts; I will have the opportunity to practice on them whenever I want which is absolutely fantastic. I hope this will take my game to the next level. The competition has finished but now I am one with the clay in my club.”

Contest winner Luis Hernandez added, “I want to thank Har-Tru for making this competition possible. For me, tennis has always played an integral role in my life and connections with family and community.”



Love Your Court, Love Your Game.

In 2014, Har-Tru Sports sponsored a customer contest entitled “Love Your Court, Love Your Game.” Contestants described how court care professionals created or enhanced the clay court playing experience, and how tennis court maintenance staff play a part in improving the tennis experience, life, relationships, and community.

Developing champions: the competitive advantages of playing on Har-Tru clay courts

- 80% of top-ranked players developed their games on clay
- Reduces the risk of injury
- Easier on the body than other types of courts
- Slower ball speed for a more enjoyable game
- Cooler surface temperature
- Surface dries quickly after rain
- Environmentally safe surface
- Player develops a better, more well-rounded game



When the going gets

TOUGH

the tough

PLAY TENNIS



How Luis Hernandez, Har-Tru Sports contest winner, became One with the Clay

Luis Hernandez and his wife Marlene were hoping for a nice vacation in the Bahamas. Instead, enjoyment turned to terror as a shark clamped his right arm and left him severely wounded.

Hernandez had been an avid tennis player. When he turned 40, he picked up the game again, started playing in tournaments and winning them. After the shark attack, he needed 15 surgeries to reconstruct his arm. His doctor told him he wouldn't play tennis again.

But Hernandez had another idea. Working in his garage, his eye wandered again and again to his tennis bag, and he couldn't stop thinking about playing. One day, with his right arm still in a cast, he grabbed his racket and a ball with his left hand and started hitting against the wall. He hit a volley of 50 without missing once.

He was happy—and surprised.

Tennis pro and coach Greg Mousette was also surprised. "I've never seen anybody work that hard to overcome something like that. He worked so hard to teach himself left-handed. After all those surgeries, it must have been frustrating for him."

Hernandez got to the point where he was almost as good, or even better, than when he played right-handed. He was now beating players with his left hand that he used to beat with his right hand. He had an incredible love for the game, and a determination to play.

But that wasn't the happy ending for Luis Hernandez. One Saturday afternoon, when nobody else was around, he was practicing as he often did. Working with a ball machine, he jumped into the air to hit a shot. When he came down, his ankle was broken. Lying on the ground, alone, balls kept shooting at him out of the machine. He kept ducking back and forth, but they didn't stop coming. Finally, someone in the clubhouse heard his shouts and came out to help. He made it off the court, but he would be off his leg for months.

If you've guessed that a man who survived a shark attack and kept playing wasn't going to be stopped by a broken bone, you're right. Because not only did Hernandez have a wellspring of determination, he also had a daughter who loved the game.

With a cast on one arm, and crutches supporting him, Luis Hernandez took his daughter Malanie to the tennis courts for her lessons. He couldn't stay away. He loved the game, and now

it was also a way to connect with his daughter. Even though he couldn't play, she could—and that filled a part of him that was missing.

They'd go to the court together and spend hours playing. They'd come home and watch tennis and comment on the matches. It became a big part of how they bonded, and how he recovered.

Other members of the club drew inspiration from Luis—seeing him fight back, seeing what he went through, and seeing the level of play that he eventually regained. His daughter did too. Like many, she never thought he'd play tennis again after the shark attack. But there he was, playing left-handed; and, as she said, she still couldn't beat him.

After the shark attack, he needed 15 surgeries to reconstruct his arm. His doctor told him he wouldn't play tennis again.

Teaching the Next Generation

After looking into the cost of summer science programs for her daughter, Ms. Janine Jensen decided she could develop a more affordable summer science class for teenagers in the Madison County area.



To start the program, she called on local individuals and businesses to help provide information. Thanks to many contributors, including Luck Stone, the first year of the program was extremely successful.

The Madison County group, known as **Mad Arts**, asked Luck Stone to demonstrate and discuss the geology on its site. Geologist Bruce Faison led a discussion of geology from the pit of the Greene Plant. The discussion ran much longer than originally planned thanks to the many questions posed by both students and parents.

A second stop on the tour was the Specialty Products Plant. Associates Steve Curtis and Roger Meeks described the plant's process, the materials used to create specialty products, and the many applications they have.



Special thanks go to Luck Stone Associates: Bruce Faison, Roger Meeks, Stanley Powell, Steve Curtis, and Duane Price for leading the tour. Thanks also go to Lewis Parady, Plant Manager at Luck Stone's Greene Plant, for agreeing to host the group and calling them to action.

Community Activity

The Bull Run Plant hosted the **South Riding Fire Department** for a tour and a half day of training on site.

The Caroline Plant hosted a visit from the **Richmond Mini Miners**.

Associates at the Burkeville Plant held a food drive to support **ALMs House** (a local food bank) for the holidays.

The Bealeton Plant provided use of their front field for a **helicopter club**.



The Pittsboro Plant hosted the **Woods Charter School** for a tour by 5th graders, their parents, and approximately 42 people. Associates loaded explosives into the quarry wall to demonstrate how to blast rock loose, had a classroom discussion, and had a riding tour through the pit and plant. Then they fed the group hot dogs.

The Massaponax Plant held a **driver safety two-day event**. Luck Stone pickups and Superior Paving's dump trucks came out and hosted high school seniors, demonstrating blind spots for big vehicles, how to change a tire, how to check fluids, how to drive and what to expect with big trucks.

The Greene Plant donated materials and lent volunteers at **Little League parks** throughout the Charlottesville community.

The Fairfax Plant hosted a fire department tour and sponsored a **10-hour day of rescue training** (confined-space training), including 50 students who were working toward their certification.

The Charlottesville Plant was the main sponsor at the **Stone Robinson Elementary School** community fun run, with two associates running in the event.



The Leesburg Plant built a rain garden for **Creighton Elementary School**.



The South Richmond Plant donated 240 tons of stone to **Elk Hill Varina School** and **Scott Elementary** to help build tracks for their students.

The Caroline Plant **reclaimed 68 acres of mined land** back to an agricultural use.

The Burkeville Plant **seeded approximately seven acres of fill** area to prevent erosion.

Associates from numerous plants participated in a display at **Field Days of the Past**, which featured an antique rock crusher in a festival celebrating rural life in Goochland, Virginia.

Caroline Plant associates participated in the **Caroline Food Bank** and at **Ladysmith Day**, a local celebration of their community.

The Charlottesville Plant team helped work in the kitchen at the local **Meals on Wheels** on 22 days between July 14 and Oct 31—two associates for about 2 hours each time.



Donations of volunteer time and product materials have been made from Luck Stone, Har-Tru, and Luck Stone Center to the **Wounded Warrior Project**.

The Powhatan Plant hosted a fundraising event for the **Macon Volunteer Fire Department**, loading local residents' trucks with driveway stone in exchange for a donation to the Fire Department.





2014 Governor's Environmental Excellence Award

Luck Companies was honored for commitment to sustainability across all business units (Luck Stone, Luck Stone Center, Har-Tru Sports, Luck Development Partners), resulting in significant improvements in water conservation, land preservation, waste generation, and energy savings.

"We are honored to be recognized with this prestigious award for our longstanding efforts in environmental stewardship and management," said Charles Luck, IV, President and CEO of Luck Companies. "We are committed to making a difference in the lives of others and building legacies for future generations. Our overarching sustainability goal is to enable current and future generations to thrive socially, economically, and environmentally."

2014 AWARDS

Virginia Mineral Mine Safety Awards

The following Luck Stone operations were recognized for outstanding safety achievements in Virginia's mineral mining industry. Mineral Mine Safety Awards are presented to mining operations in Virginia that have met or exceeded a benchmark of safety criteria in their day-to-day plant operations. The awards are sponsored by the Virginia Department of Mines, Minerals and Energy (VDMME) and the Virginia Transportation Construction Alliance (VTCA).

ROCKVILLE PLANT

Quarry 25,000–50,000 Employee Hours

LEESBURG PLANT

Quarry 50,000–75,000 Employee Hours

CAROLINE SAND AND GRAVEL

Open Pit 10,000–30,000 Employee Hours

The Virginia Department of Education

Business and Industry Partnership Award for Secondary Career and Technical Education

LUCK COMPANIES

Honored for being a major partner of the Goochland schools CTE programs by mentoring students, assisting in classes and special projects, assisting in the development of new CTE programs, and serving on the school's CTE advisory committee.

Elizabeth River Project

Sustained Distinguished Performance River Star Business

GILMERTON YARD

Model level

BERKLEY YARD

Achievement level

The nonprofit Elizabeth River Project honors facilities that make environmental stewardship the business standard on the Elizabeth River.

National Stone, Sand, & Gravel Association Awards

Environmental Excellence

LEESBURG PLANT Gold

The Leesburg Plant was honored with national recognition for actively contributing to the maintenance of the environment in and around their operations as evidenced by a corporate commitment to the exemplary use of environmental controls and systems that meet and exceed technical, environmental, and regulatory requirements.

Sterling Safety Award

LUCK STONE

Luck Stone was named the Sterling Safety award winner for Large Aggregate company by the NSSGA. The Sterling Safety Award was created in 1994 to recognize the companies that have the lowest total accident incidence rate for the previous year in their category among NSSGA members. Sterling Awards recognize member companies that achieve the lowest injury incidence rate for the previous calendar year (2013) in their size category. Data on which the award is based is provided by MSHA.

2014 Virginia Division of Mineral Mining Reclamation Awards

Overall Winner and Best Quarry

CHARLOTTESVILLE PLANT

This award is presented to mining operations in Virginia based on projects that have resulted in successfully reclaiming a portion of their permitted operations.

Special Achievement in GIS (SAG) Award

Environmental Systems Research Institute (ESRI) User Conference

LUCK STONE

The Special Achievement in GIS Award acknowledges leadership, vision, hard work, and innovative use of ESRI's GIS technology. Luck Stone was presented with the award for the successful implementation of ArcGIS Online for Organizations, which includes a mobile Geographic Information System app.

Blue Sky Fund	The House, Inc.
Boys & Girls Club of Richmond	Thomas Jefferson Foundation, Inc.
B.U.O.Y. Foundation	Unbound RVA
Capital Area Part. Uplifting People, Inc.	UVA Community Relations
Capital Region Land Conservancy	VA Foundation for Independent Colleges
Chesapeake Bay Foundation	VA Home for Boys and Girls
Christmas Mother-Goochland	VCU Foundation
Church Hill Activities & Tutoring, Inc.	VCU Massey Cancer Center
Cultural Landscape Foundation	VCU School of Business Foundation
Earth Sangha	Virginia Center for Architecture Foundation
Echoing Green	Virginia Museum Foundation
Elizabeth River Project	VMI Foundation
Elk Hill Farm	YMCA of South Hampton Roads
Faison School	
FOCUS Richmond	
Free Clinic of Powhatan	
George Mason Univ. Foundation, Inc.	
Goochland Co Fire CO-1	
Goochland Co Fire CO-2	
Goochland Co Fire CO-3	
Goochland Co Fire CO-5	
Goochland Free Clinic & Family Services	
Goochland Rotary Foundation, Inc.	
Goochland YMCA	
J. Sargeant Reynolds Community College	
James River Association	
James River Green Building Council	
Junior Achievement of Central VA	
Junior Achievement USA	
Lewis Ginter Botanical Gardens	
LINC	
Mary Baldwin College	
Nature Generation	
Neighborhood Resource Center	
Partners International Foundation	
Petty Family Foundation	
Piedmont Environmental Council	
Powhatan YMCA	
Rappahannock Area YMCA	
Rotary Club of Powhatan	
Spotsylvania Greenways Initiative	
St. Christopher's School Foundation	

2014

LUCK FOUNDATION
Grant Recipients

The Foundation awards grants of \$1,000 or more to public charities classified under Section 501 (c)(3) and other nonprofit organizations that support Luck Companies' corporate goals.

“We will positively impact communities and the lives of others through our charitable giving.”

– Luck Foundation mission statement

The Luck Companies Foundation engages in partnership opportunities with nonprofit organizations that will result in a positive long-term impact in our communities and areas of focus.

The foundation focuses on supporting youth development & education and environmental stewardship.

YOUTH DEVELOPMENT & EDUCATION

Dedicated to developing generations of values-based leaders and supporting educational programs that help youth build character, excel in academics, and embrace citizenship.

ENVIRONMENTAL STEWARDSHIP

To inspire a shared responsibility to create a positive outcome for natural, built, and work environments.



The Elizabeth River Project's Dominion Virginia Power LEARNING BARGE is the world's first floating wetland classroom and America's Greenest Vessel. It's a "steward ship," teaching the children of the river environmental stewardship actions and showing how to make the Elizabeth River healthier.





Preparing for a Not-So-Rainy Day

It happened in the 1930s, 1960s, 1980s, 1990s, 2002, 2005, 2007, and 2012: Virginia suffered severe droughts. The question isn't whether there will be another one; the question is when will it happen next, and what can be done about it?

For Loudoun County, the answers are critical

The Virginia Department of Emergency Management ranks Loudoun and neighboring Prince William as the two counties with the highest overall risk of drought damage in the Commonwealth. Maintaining an adequate water supply, planning for growth, and preparing for the worst is vital for their well-being.

After the drought of 1999, every locality in Virginia was required to create a water supply plan that outlined their strategy to prepare for a future drought. Many communities sought to build reservoirs, find a large groundwater supply, reduce demand, and take other measures to prepare for shortages.

After extensive study, Loudoun Water and Luck Companies developed an inventive and practical solution to address the county's needs. In 2009, they announced a plan to turn retired quarries into functioning water reserves in a process known as 'water banking.'

Innovative public-private partnership

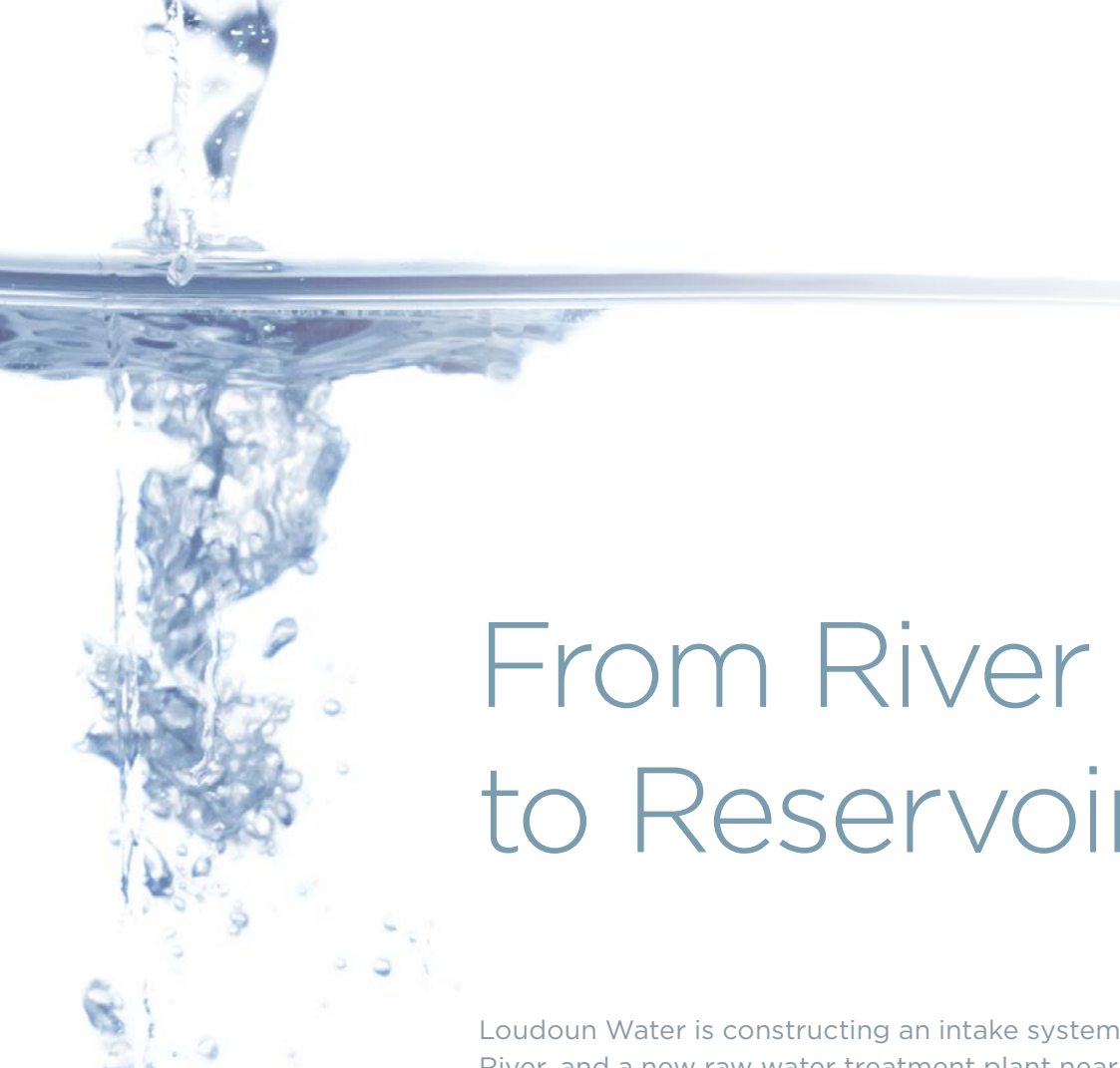
Water banking uses retired quarries to store water so that it can be drawn upon in times of drought. In this case, four Luck Stone quarries will eventually store as much as 28 billion gallons of water. The Leesburg North Quarry, the first of the four to be converted, will hold more than one billion gallons of water. Three others will be phased in as their mining reserves retire and their life as a reservoir begins.

Water banking in retired quarries is among the more environmentally sensitive solutions to increasing water reserves. While it takes a long time to build a quarry, the benefits are significant and the ecological impact is less than with many other options.

For instance, a typical reservoir is created by damming a river with a wall that is 60–80 feet high. The dam then backs up the river to form a lake. In the end, the lake might hold anywhere from 12–15 billion gallons of water. However, the process also inundates an average of 15–20 miles of streams, and floods 50–200 acres of wetlands. At the same time, 1,000–2,000 acres of farmland, timber, or other agricultural resources are immediately lost and never recovered. By contrast, the four Luck Stone quarries near Leesburg will productively utilize 600 acres of land for many years, with virtually no wetland or stream impacts—and gain 28 billion gallons of storage in the process.



John LeGore, President of Luck Stone Corporation, and Dale Hammes, General Manager of Loudoun Water (retired), discuss the transformation of the Leesburg Quarry into a water bank reservoir.



From River to Reservoir

Loudoun Water is constructing an intake system from the Potomac River, and a new raw water treatment plant near the Dulles Greenway. The intake and raw water transmission pipes are how the quarries will be filled. The intake system is designed to withdraw water gradually over time during normal and peak flows of the river. The water is banked in advance of its need. Reserves in the quarries will then serve as a first response to water supply emergencies.

This is important because it increases the available supply and also eliminates the need to draw as much from the Potomac during the ecosystem's most stressful times, such as a drought. Ideally, these reservoirs will provide a 120-day supply during times of emergency.

Loudoun Water's new pump station building was also designed with the surrounding community in mind. The facility's architecture resembles a residential building rather than an industrial structure, and engineering controls have been designed to minimize any noise generated by the equipment within the building.

Water banking in retired quarries is among the more environmentally sensitive solutions to increasing water reserves.



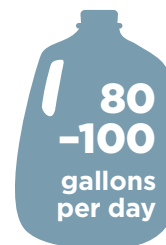
1B gallons

The North Leesburg
Quarry will hold more than
one billion gallons of water.

The treatment facility is being constructed on a 50-acre parcel owned by Loudoun Water. Only 12 acres of the parcel will be developed. The remaining acres will be left in their natural state and will be protected from future development.

In the near term, Luck Stone's Leesburg quarries will supply the surrounding area with essential building materials to support a growing population, and in the long term, Loudoun County will gain the security of affordable, sustainable, and reliable drinking water. The agreement to reserve the Leesburg sites for quarry use and water storage ensures that future generations have access to the resources they need to continue to grow and live comfortably.

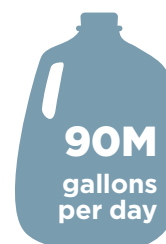
Luck Stone has committed to mining 1.7 million tons of stone per year until 2017, when the Leesburg North Quarry will be ready for its transformation into a reservoir.



In the U.S., each person uses about 80-100 gallons of water per day



Loudoun Water provides up to 57 million gallons of water a day



By 2035, officials estimate the need will increase to 90 million gallons per day



Maintaining Reserves

What are reserves, and
why are they important?

In **1** lifetime,
a person needs approximately

1.1 million

pounds of aggregate for
infrastructure, products,
and housing.

To ensure the long-term health of our company, our people, our communities, and our planet.

Luck Stone's sustainability pledge

An important goal of Luck Stone is to identify reserves that replace the amount of material consumed in any given year. Ideally, this results in a supply that is never depleted.

Reserves are important to Luck Stone because they allow the company to plan for future growth, and to identify markets that can benefit the community for many years. Reserves are important for sustainability because they sustain the infrastructure of the community and ensure the viability of the company for decades to come.

There are two types of reserves: possible and proven. Possible reserves have a strong possibility that usable resources exist. Proven reserves have been drilled and tested, and the quality and quantity of resources has been identified.

The goal of the business development team is to ensure that Luck Stone will have at least 25 years of proven reserves after the year 2030—in every

market being served. This is a complicated way of saying “the next 40 years,” with a focus on the years from 2030 to 2055.

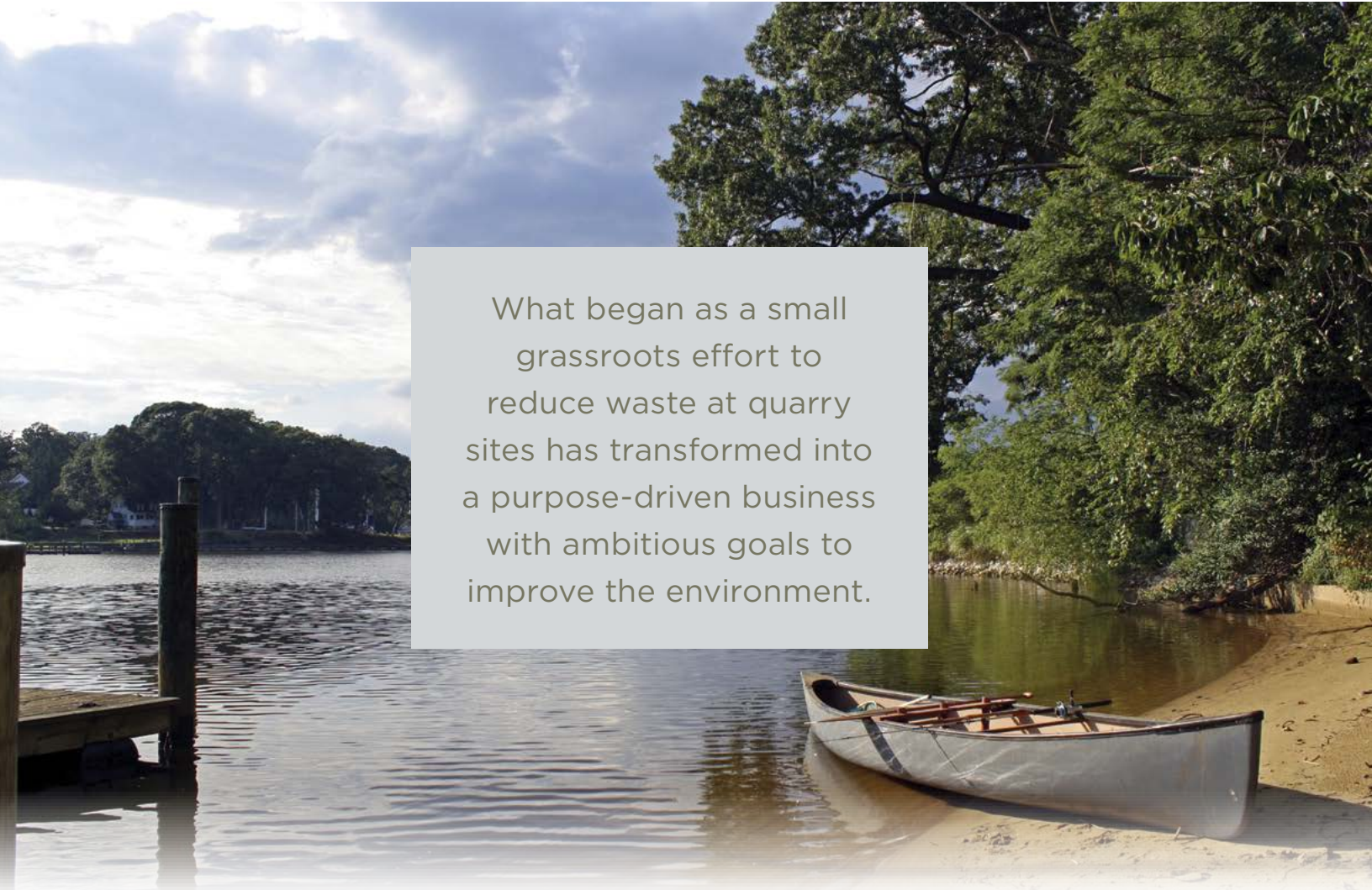
Why the next 40 years? Luck Companies President and CEO Charles Luck, IV sees those years as the most important working years for the next generation of associates and families at Luck Companies. As Luck Companies goes through generational change on multiple levels, it's key that the future is solid with significant reserves. The markets will expand and there will be an increasing demand for aggregates. Over each person's lifetime, there is a demand for 1.1 million pounds of aggregate—and there will be enormous population growth over the next 40 years in many markets. These reserves will be a key part of securing future aggregates for millions of people throughout those markets.

In addition, associates and local communities know that when Luck Stone identifies a market to serve, the company is committed to being there for the next several decades. Luck Stone doesn't buy a quarry, deplete its reserves and move on, thereby limiting the economic impact to only a few years. When they invest in a community, it's clear that they intend to stay. This includes finding new reserves in the immediate area, or serving the market in innovative ways such as by rail or barge.

By focusing on sustainable reserves, Luck Stone creates long-term stability, resources for greater impact on the local economy, potential careers for new workers, and philanthropic ventures for several decades at a time. Examining each market, and creating a goal for reserves, will keep the company in a strong position past the year 2055.

In Northern Virginia there are two very large plants that will position Luck Stone for many decades. In Hampton Roads, Richmond, Charlottesville, and even in potential greenfield markets, the goal is to identify additional growth opportunities. This commitment wholeheartedly follows Luck Stone's sustainability pledge “to ensure the long-term health of our company, our people, our communities, and our planet.”

The Growth of Luck Ecosystems



What began as a small grassroots effort to reduce waste at quarry sites has transformed into a purpose-driven business with ambitious goals to improve the environment.



Luck Ecosystems transforms raw materials into performance media to optimize sports field play surfaces, support organic plant growth, and naturally filter stormwater.



68,000 

In 2014, Luck Ecosystems repurposed 68,000 tons of overburden into premium topsoil, baseball infield mixes, biofiltration media, and green roof media.

As the business grew, the team learned more about the materials, and the mission shifted from an internal focus—how to reduce waste—to an external focus—how to improve the outdoor experience for the communities they serve.

So a team of passionate associates began to find other uses for the soil and rock—turning it into premium topsoil, baseball field mixes, biofiltration media to naturally filter stormwater, and other beneficial products. At first, the goal was simply to convert the overburden into something useful. As the business grew, the team learned more about the materials, and the mission shifted from an internal focus—how to reduce waste—to an external focus—how to improve the outdoor experience for the communities they serve.

The team grew in numbers and experience. Today, Luck Ecosystems makes products that transform raw materials into premium performance media. They offer guidance to customers and communities that need to manage the effects of stormwater runoff. They produce the only horticultural growing media registered with the Virginia Department of Agriculture and Consumer Services. They supply professional-grade media for golf courses and baseball fields. And they hope to become the industry-leading resource for safe, more natural water filtration and green construction.

Transforming Luck Ecosystems isn't simply a job for the associates involved. It's a calling, a cause, a movement, and a need. Working toward the future, the team plans to take what they've learned and expand even further—to create the foundation, whether small-scale or large, for ecological systems that support the life of many communities.

What is stormwater runoff?

Stormwater runoff is precipitation in an urban or suburban area that does not evaporate or soak into the ground but instead runs across the land and into the nearest waterway.

What can be done to counter the effects of development?

There are many low-impact development techniques that can be installed around homes and buildings. Rain gardens, porous pavement, green roofs, and streambed restoration are a few techniques that help reduce pollution from developed areas.

Engineering the Groundwork for Better Living

Working with nature is rewarding, but it can also be a challenge. Unpredictability can wreak havoc on man-made environments, and man-made environments can upset the balance of nature.



For sports facilities like baseball fields and golf courses, daily issues range from drought to downpours—combined with the need to enhance natural surroundings with as little environmental impact as possible. For urban and suburban communities, the need to manage development is an ongoing concern—from mitigating stormwater runoff to supporting plant life.

“In any outdoor industry, Mother Nature is one of the biggest challenges you have to deal with on a daily basis,” said one golf course superintendent.

Working with the environment takes many forms, and every outdoor professional has unique project needs. But there’s one thing they share in common: they all require materials that produce consistent results in the face of unpredictable circumstances.

“In our industry, close isn’t good enough,” said the owner of a field maintenance company. “It has to be exact.”

In order to meet that demanding precision, and ensure results across a wide range of applications, Luck Ecosystems combines the resources and proven environmental stewardship of Luck Stone with a deep commitment to improving the outdoor experience in the communities they serve.

Whether it’s to serve a local ball field or an entire watershed, Luck Ecosystems transforms raw materials into performance media to optimize sports field play surfaces, support organic plant growth, and naturally filter stormwater. The company delivers customer-inspired solutions by precisely blending basic elements to solve specific application challenges.

“It’s very difficult to get a consistent mix of raw materials for bio-retention. Yet, consistency is essential to the success of these types of systems,” said a water management consultant.

The product expertise and advanced blending capability

of the Luck Ecosystems team ensures consistent, available product for every type of project. The extensive and well-managed quarry network of Luck Stone provides abundant natural resources and a proven logistics and distribution system for on-time delivery, regardless of the project size.

Improving the outdoor experience isn’t easy, but it can be rewarding for those who do and for the communities they serve.

As a golf course maintenance manager noted, “I have these 250 acres to manage and they are my sole responsibility. I take pride in the fact that my decisions each day impact how these acres perform, and I see the immediate impact of my decisions on a day-to-day basis.”

For the associates of Luck Ecosystems, helping customers succeed in the outdoor industry builds on Luck Companies’ legacy and value proposition that doing good is the best path to doing well.



Nutrient management plans are a significant part of the Chesapeake Bay Watershed Cleanup Act. Aggregate media is the basis for a green technology that dramatically impacts how phosphorous and other pollutants are removed from stormwater.



Includes infield material and related products designed to optimize sports field surfaces and facilitate safe, frequent play. The right balance of sand, silt, and clay to reduce maintenance time while increasing playing frequency.

FieldGem Product Line

- Pro Infield
- Premium Infield
- Choice Infield
- Red Mound Forming Clay



Safe, more natural water filtration and green construction to help engineers meet and exceed regulatory guidelines for removing water pollutants and adopting sustainable building practices.

RainScape Product Line

- Biofiltration Media
- Stream Bed Restoration
- Structured Soil
- Compost Amended Soil
- Green Roof



High-quality, consistent growing and play surface media to enhance the outdoor experience for customers and communities and for the sustainable management and growth of community green spaces.

GreenScience Product Line

- Premium Topsoil
- Screened Soil
- Structured Soil
- Custom Blends



Customized blends and tighter quality control. Includes topdressing and rootzone sand, and custom material for specific needs such as tee box blends and bunker sand. Experience in the golf course industry to assist superintendents in choosing existing products or developing customized blends.

CourseScience Product Line

- USGA Rootzone
- Utility Topdressing Sand
- Bunker Sand
- Alpha Utility Sand
- Tee Construction Rootzone
- 7-2-1 Blend
- Drainage Gravel
- Cart Path Aggregate

“It’s very difficult to get a consistent mix of raw materials for bio-retention. Yet, consistency is essential to the success of these types of systems.”

When Their Customers Spoke, Luck Stone Center LISTENED



Luck Stone Center provides natural and manufactured stone products that enable trade professionals to realize their visions for residential and commercial projects.

Over the past two years, Luck Stone Center asked their customers a lot of questions. They listened, and they learned. What they discovered gave them a deeper understanding of their customers' worlds, and motivated the company to evolve and make significant changes to its business.

Today, Luck Stone Center has a rejuvenated mission to support trade professionals—the installers, masons, builders, and developers that make communities great. Among the changes made to support this community are the focus on man-made products, concrete block and masonry tools, as well as increasing the inventory of natural stone products.

“There’s a strong demand for stone in the building market,” said Mark Whitfield, Luck Stone Center’s Director of Product Management. “Stone is timeless and appeals to almost everyone in a very deep way. It reminds us of things that are strong, permanent, steady.”

Stone and man-made stone veneers have some of the longest life spans of any building material. Natural stone can last the lifetime of a property. Man-made stone veneer has a durability and product life that is typically warranted by the manufacturer for 50 years.

“We are committed to reconnecting with contractor customers, listening to their needs and aligning our business practices with theirs,” said Whitfield.

In addition to meeting the operational demands of building, Luck Stone Center is dedicated to finding and providing environmentally sound materials and methods for their customers.

Man-made stone veneers carried by Luck Stone Center are manufactured with low emissions that meet indoor air quality guidelines for Greenguard. They are also made with more than 50% recycled material. Another product, the IQ dustless power saw, eliminates the need for water during cutting



and captures 95% of dust in the process. The result is less environmental impact and a reduced risk of silica exposure. And rainscreen solutions for masonry installations aid sustainability practices by preventing moisture that can collect behind masonry and lead to black mold and other environmental issues.

“We have a wide variety of sources of material that most of our competitors can’t match,” said Whitfield. “With this, we are customer-focused with the number of stone yards and inventory offered by Luck Stone Center.”

Other efforts to focus on trade professionals and the sustainability of their business include offering workshops that provide CEU credits and specific programs such as Segmental Retaining Wall (SRW) certification, for example.

Luck Stone Center offers services like CAD work, project estimating, materials sourcing, and referrals. Their goal is to leverage these services to build stronger loyalty with the trade community.

As Operations Manager of the Luck Stone Center Leesburg Campus, Rafael Gonzalez takes pride in Luck Companies’ longstanding commitment of listening to comments and suggestions and then creating solutions that work best for customers.

“Our associates have many years of experience and significant knowledge of stone,” said Gonzalez. “Also, we have lots of resources at our fingertips through Luck Companies and Luck Stone. We can provide stone and materials to meet any budget, no matter how large or small, in order to make a homeowner’s dream into reality.”

Learning About the Natural World by Discovering it First-Hand

In the past two years, Luck hosted several groups of fifth graders as part of the Blue Sky Fund. The Blue Sky Fund is a nonprofit organization that provides transformational experiences for urban youth through outdoor education. Their goal is to give every young person the opportunity to discover themselves by actively engaging the natural world.

In 2014, Luck Stone hosted a group of fifth graders from five different inner city elementary schools at the Boscobel Quarry. The students were studying geology in their classes at that time, and were able to touch and see many of the concepts that they were learning about in school. Among the things they learned about first-hand were the difference between igneous, metamorphic, and sedimentary rock; erosion and weathering of stone; types of soil and the creation of soil; and how nutrients are made available to plants.

On that tour, students were also invited to visit the corporate testing laboratory, where they learned how Luck Stone uses the rocks, and why it is

important to study the properties of the rock. They learned about hardness, abrasion, color, density, and other important attributes. Creative ideas and questions made for some good discussions.



In 2015, another group of students experienced many of the same things, but also had a visit to Luck Stone Center to see how consumers can use rocks. Students saw granite countertops, pavers, veneers, and stackable wall stones that each have unique properties that make them suitable for different uses. Each student took home a rock they found on the yard.





Making a Difference in the Lives of Others Around the World

Luck Companies builds deep relationships inspired by trust. The company believes in doing whatever it takes to meet the needs of its customers, associates, neighbors, and the land. Luck Companies takes pride in helping to build communities today and over the long haul.

Above: The Greene Plant hosted a delegation of Chinese mining officials who were touring the U.S. to study quarry safety and efficiency.

The tour provided a first-hand view of the Greene Plant to members of the Chinese delegation's Land Management and Natural Resources group from the Henan Province. The tour highlighted Luck Companies' commitment to the safety of mine workers, safe mining practices, and environmentally sound mining procedures.



External groups hosted by Luck Companies


16 events / **974** guests

Safety

Luck Companies has been a leader in industrial safety and health throughout its 92-year history.

NSSGA
STERLING
SAFETY
AWARD
WINNER

for Large
Aggregate
Company



The company has consistently produced industry-leading results in its safety and health programs, and the total recordable case rate significantly outperforms industry averages. Luck Companies' Value Safety program, in effect for more than 10 years, is behavior-based. A key element of the program is a drive to continually innovate, emphasizing new components that lead to sustainable improvement in performance. There is a heavy emphasis on safe working

conditions with compliance to federal regulations. A critical component of Luck Companies' core values is a commitment to providing all associates a safe working environment. As such, all associates are expected to contribute and commit to the safety and well-being of themselves and others. A point of pride for the company is extensive safety training, well-maintained mobile equipment, and mechanical safeguards that ensure safe working conditions.

Comparative Incident Rate

	2012	2013	2014
Aggregates Industry*	2.4	2.2	1.9
LUCK STONE	1.1	0.89	1.30
Stone Manufacturing Industry*	4.6	4.9	4.1
LUCK STONE CENTER	4.19	2.53	0.0
HAR-TRU SPORTS	0.0	2.63	3.56
LUCK COMPANIES TOTAL	1.32	1.07	1.10

* Industry averages are available only for the previous year's data.
We use the latest information available provided by the U.S. Department of Labor.

As of 11/1/14: Number of locations that are 0-0
(0 medical injuries and 0 lost time injuries) for
two consecutive years = 13 out of 23 Luck Stone
Quarry Locations

Safety and Health Regulatory Requirements at Luck Stone

“Winning the NSSGA Sterling Award is both an honor for a job well done, and incentive to keep doing better.”

– Abel Parker,
Director of Risk
Management at
Luck Companies



Luck Companies is in the business of working with stone and stone products and is subject to numerous safety regulations relating to such. Both the Luck Stone Center and Har-Tru Sports business units are classified under manufacturing and are regulated by the U.S. Occupational Safety and Health Administration (OSHA).

Luck Stone is classified as mining, so it falls under the jurisdiction of the U.S. Mine Safety and Health Administration (MSHA). In the mining industry, independent contractors have a higher incident rate while on mine property than actual miners. Luck Companies makes every effort to assist these contractors in working safely and complying fully with MSHA rules and regulations.

Luck Companies maintains its philosophy of being 100% knowingly compliant with all rules and regulations and working in partnership with OSHA and MSHA to help protect our workforce. In 2013, Luck Companies continued its Operational Excellence Evaluation program, which consists of full internal compliance audits at each location every year. Possible

hazards are identified during these evaluations, and violations are corrected immediately. Other recommendations must be acted upon, with a 90% correction rate expected within a month. Additional resources are dedicated to assisting outside contractors with safe work practices while they are partnering with Luck Companies.

Occupational Health

In alignment with its commitment to safety, Luck Companies has long been a leader in occupational health programs, ensuring that its associates have a healthy work environment.

The goals of Luck Companies' occupational health program are:

Provide

a healthy work environment for Luck Companies' associates

Produce

products that can be used safely and effectively by our customers

Ensure

that we protect the health of associates and educate the communities where we operate

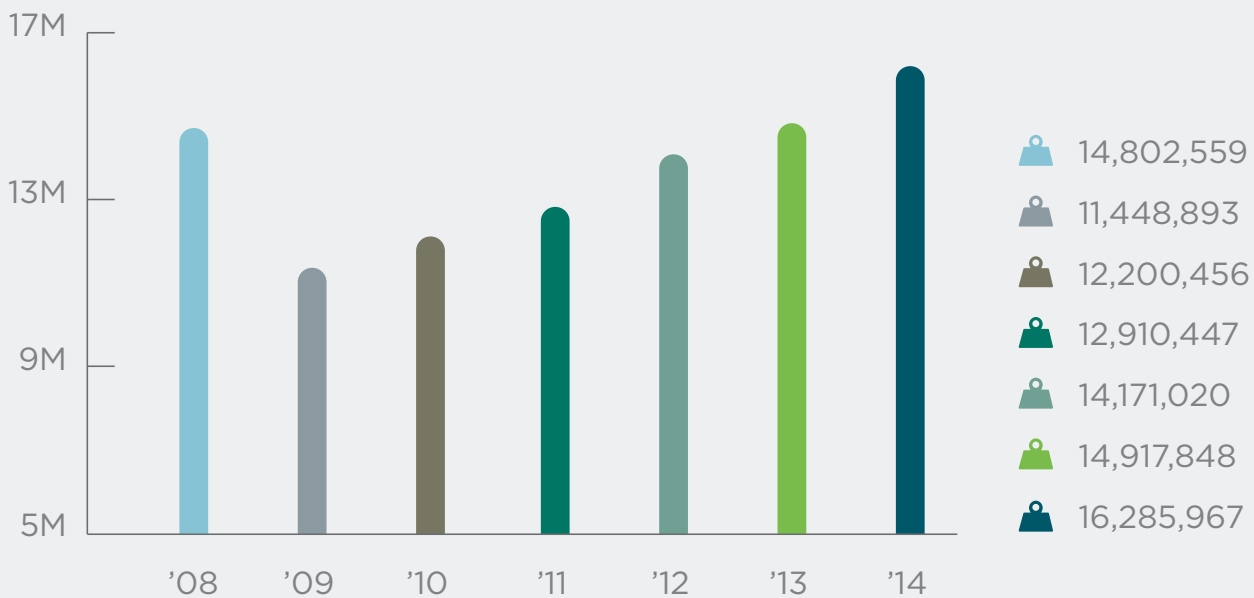
In 2014, Luck Companies continued its pre-employment physical program—associates hired who will be performing certain functions complete a physical to ensure they can perform the function of that role successfully based on their health status.



	2012	2013	2014
Hearing tests conducted	426	420	400
Recordable hearing losses	0	0	0
Standard threshold shift (potentially work-related)	2.5%	0.0%	3.0%
Noise and dust exposure assessments	200	286	256
Noise and dust exposure above OSHA/MSHA limits	0	1	4

Summary Data

Annual Volume (Tons): Luck Stone



2014 Philanthropy

Sponsorships & other contributions

\$107,660

Stone donations

\$82,247

Matching gifts

\$66,790

to 85 different organizations

Grants

\$756,675

to 55 organizations

Areas of focus:

- Youth Development & Education
- Environmental Stewardship



Taxes

Real estate

2012 \$1,548,300

2013 \$1,625,431

2014 \$1,561,250

Machinery & tools (personal property)

2012 \$1,706,304

2013 \$1,610,846

2014 \$1,996,116

Recycling



Pounds of heavy metal recycled

2012 899,278 / \$93,176 credited
2013 970,065 / \$85,663 credited
2014 963,335 / \$87,070 credited
 (steel is the same as #1 heavy metal)



Pounds of manganese recycled

2012 697,120 / \$130,647 credited
2013 72,120 / \$9,497 credited
2014 495,200 / \$78,049 credited



Recycled concrete (by sales tons)

2014 Total / 181,762 tons

GILMERTON

2011 15,051
2012 11,988
2013 7,473
2014 12,390

TOANO

2011 41
2012 0
2013 368
2014 1,080

FAIRFAX

2011 7,608
2012 0
2013 13,390
2014 27,563

SPOTSYLVANIA

2011 0
2012 0
2013 622
2014 2,759

OYSTER POINT

2011 0
2012 4,049
2013 2,467
2014 5,129

BULL RUN

2011 0
2012 0
2013 454
2014 25,867

DULLES RECYCLED AGGREGATE

2011 0
2012 0
2013 5,430
2014 35,311

LEESBURG

2011 18,804
2012 41,703
2013 49,776
2014 71,567

GOOSE CREEK

2011 0
2012 0
2013 100
2014 96

Greenhouse gas emissions GHG (MTCO2E*)

2011	2012	2013	2014
3.84	3.65 ↓	3.97 ↑	3.89 ↓

*Metric tons of carbon dioxide equivalent per 1,000 tons of stone produced



Batteries recycled

2012 190
2013 154
2014 179



Electric motors

2012 45,944 lbs
2013 20,520 lbs
2014 41,679 lbs



Oil

2012 20,593 gal
2013 14,224 gal
2014 13,138 gal



Number of Associates

2014 / **789**



Water Sample Data

Samples collected 73
Samples above permit limits 0

Mining 101

Ancient history

The oldest known mine is the “Lion Cave” in Swaziland, which radiocarbon dating shows to be about 43,000 years old. At this site, Paleolithic humans mined hematite to make red pigment. Mines of a similar age in Hungary are believed to be sites where Neanderthals may have mined flint for weapons and tools.

Ancient Egyptians, Greeks, and Romans all had sophisticated mining operations, including the Romans’ use of hydraulics drawn from aqueducts to remove overburden.

In the Americas, there are ancient, prehistoric copper mines along Lake Superior. Native Americans used this copper starting at least 5,000 years ago. Copper tools, arrowheads, and other artifacts were part of an extensive native trade network. Obsidian, flint, and other minerals were also mined, worked, and traded.

Sustainability criteria in mining





Luck Stone's mining process

Discovery

Markets are evaluated to determine a need for supplemental reserves or replacement reserves in markets where we already operate, or to determine if a growing or underserved market has a need for the products that Luck provides. Once market needs are identified, exploration is conducted to define the extent, location, and quality of potential reserves.

Decision

The decision whether to develop a mine or not includes mine planning, marketability, engineering concerns, infrastructure costs, finance and equity requirements, and an analysis of the proposed mine from the initial excavation all the way through to reclamation—with the goal of minimizing the environmental impact and footprint and integrating the community, giving us the ability to operate as a good neighbor.

Development

Once the analysis assesses a given area, development begins to create access to the reserves. Buildings and processing plants are built, and any necessary equipment is obtained or deployed. The operation of the mine begins and continues as long as it remains economical to do so.

Reclamation

Once all the ore that the mine can produce profitably is recovered, reclamation begins to make the land used suitable for future use. Mining companies are required to follow stringent environmental and rehabilitation codes in order to minimize environmental impact and avoid impacting human health.

Marketplace

According to the USGS, domestic production of crushed stone in **2014 was 1.26 billion metric tons valued at more than \$12.8 billion** produced by **1,550 companies** operating **4,000 quarries, 91 underground mines, and 210 sales/distribution yards in 50 states.**

Nationwide, **82% was used as construction material**, mostly for road construction and maintenance; 10% for cement manufacturing; 2% each, for lime manufacturing and for agricultural uses; and 4% for special and miscellaneous uses and products.



Every American will need **3 million** pounds of minerals, metals, and fuels in their lifetime.







Please visit Luck Companies
at www.luckcompanies.com for
more information about us.

To provide feedback or view
past reports, please visit
[www.luckcompanies.com/about/
sustainability](http://www.luckcompanies.com/about/sustainability).

This is the fourth Sustainability
Report for Luck Companies. Data
in this report covers the period
from January 1–December 31,
2014. All financial information
is stated in U.S. dollars.

Book cover stock: manufactured
with a minimum of 30% post-
consumer fiber and meets federal
procurement guidelines.

Book interior stock: FSC Mix
Credit Certification.

Printed with soy-based inks.

Photo contributions by Matt Rise,
Innovation Partner at Luck Stone.

2014 Sustainability Report
Release Date: August 2015

©2015 Luck Companies



LUCK COMPANIES™

IGNITING HUMAN POTENTIAL

WE WILL IGNITE HUMAN
POTENTIAL THROUGH
VALUES BASED LEADERSHIP
AND POSITIVELY IMPACT
THE LIVES OF OTHERS
AROUND THE WORLD.

P.O. Box 29682 Richmond, VA 23242-0692 **TEL** 804.784.6300 800.898.5825 **WEB** luckcompanies.com

LUCK STONE
LUCKSTONE.COM

LUCK STONE CENTER
LUCKSTONECENTER.COM

HAR-TRU SPORTS
HARTRU.COM

LUCK DEVELOPMENT PARTNERS
LUCKLEGACY.COM