



# Greener Fields Together Case Study Summary

## NewStar Fresh Foods: Mexicali Water Management



The Greener Fields Together National Farm program is designed to build and manage a farm supplier network dedicated to examining and improving sustainability in their operations. Through 5P's of Sustainability™ Verified Case Studies, SureHarvest will assist Greener Fields Together National Farm partners to evaluate their sustainability efforts according to the 5P's. SureHarvest then conducts on-site verification to ensure accuracy and authenticity.



### Meet Greener Fields Together National Farms Partner:

Founded in 1996, NewStar Fresh Foods is built on a legacy that spans centuries as the result of merging leading Salinas and Pajaro Valley family farmers. NewStar's roots are steeped in innovation, having built a reputation as the innovators of packaged spinach, and pioneered the development of iceless green onions. Today, NewStar stands out as the world's largest shipper of iceless green onions, and continues to focus on industry leadership in value-added spinach, asparagus, and tender leaf products.

### 5P's Verified Case Study: Water Management

NewStar is committed to the spirit and practice of doing the right thing. A key component of this commitment is conserving water. In the fall of 2012, NewStar made significant progress in water conservation at its Mexicali, Mexico operations by converting nearly one third of its acreage to drip irrigation and implementing other water saving techniques. SureHarvest documented and verified the Mexicali operation's water saving program.

### Sustainability Highlights

NewStar Fresh Foods is bringing innovative water saving practices to the Mexicali growing region. NewStar is making significant progress in formally establishing and maintaining its process of continual improvement in water management at its Mexicali farming operations, and has benefited from culturally and geographically adapting water conservation techniques used in its other farming regions.

In the 2012-2013 growing season, NewStar expects to see significant water savings through better irrigation efficiency. The company projects their investment in the drip system to result in reduced water costs, increased yields, and higher product quality.

**30%**  
**CROPLAND  
CONVERTED TO  
DRIP IRRIGATION**

*Being one of the first farming operations in the region to adopt drip irrigation, NewStar is using less water and energy to grow crops while improving food safety.*



SureHarvest utilizes its 5P's of Sustainability™ – a continuous improvement

business management methodology – to craft case studies that evaluate the alignment and execution of Greener Fields Together National Farm partners' sustainability efforts that contribute to financial profitability, environmental stewardship and social progress. Each case study goes through a verification step to confirm that the reported information is accurate, thorough and authentic.

### Principles

The core values that define the business strategy

### Processes

The sets of managed activities that create internal and external value

### Practices

The methods used to accomplish the desired operational results

### Performance

The metrics and measurements used to evaluate practice and process results

### Progress

The approach used to document, communicate and drive continuous improvement over time

## 1. Sustainability Principles

NewStar sustainability embodies the spirit and practice of doing the right thing, in balance with the business, the employees, and Mother Nature herself.

NewStar's principles for "Doing the right thing" include:

- Providing a quality work environment
- Investing in our communities
- Reducing our environmental footprint
- Engaging in responsible practices

## 2. Sustainability Processes

The company's staff and management identified multiple sustainability benefits that would be achieved by implementing water conservation processes including reducing long-term irrigation costs, improving food safety, and optimizing water use. NewStar took the initiative to convert 600 of its more than 2000 acres farmed in Mexicali, Mexico to drip irrigation. NewStar is

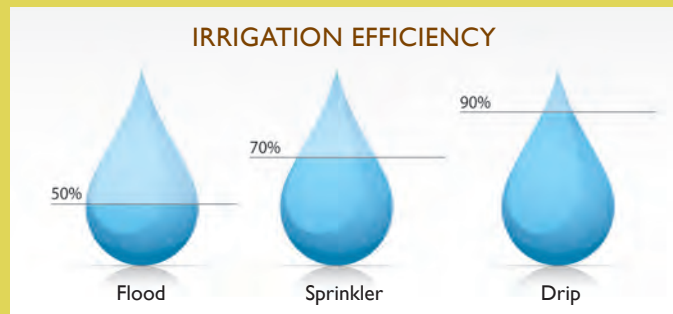
one of the first operations in the Mexicali basin to convert to drip irrigation.

## 3. Sustainability Practices

NewStar implemented a suite of water use efficiency practices including the installation of drip irrigation, monitoring the irrigation system at all times to insure it is operating properly, irrigating at night during times of extreme heat, eliminating tailwater runoff through optimizing water use, and returning unused water back to the irrigation canal for other users.

The Mexicali growing region relies entirely on irrigation water provided from the Colorado River. From a food safety and resource conservation perspective converting nearly one third of the Mexicali acreage to drip irrigation was important and timely. The transition away from the long-standing tradition of furrow or sprinkle irrigation required retraining of local field personnel who make up a set of highly experienced on-site irrigators.





With drip irrigation, more of the applied water, about 90%, makes it to the plant and soil.

*Traditional flood irrigation delivers only 50% of the water applied to the crop.*

#### 4. Sustainability Performance

NewStar has recently incorporated flow meter readings to track water use as part of its standard operation and is committed to “measuring and managing” water use efficiency by adopting improved data collection and management techniques throughout its Mexicali operations. Very few ranches in the Mexicali growing region utilize flow meters and instead rely on the local irrigation district records to track daily and seasonal water use.

#### 5. Sustainability Progress

A key component of NewStar’s continuous improvement approach is the annual review and selection of capital improvement projects. Each year department or regional operations develop a list of their high-priority projects that meet multiple company objectives including food safety, cost reduction, resource conservation and social responsibility. Management reviews and selects the final projects. Once implemented, projects are evaluated to insure they meet the anticipated benefits and cost savings.

The success of the Mexicali water management efforts ultimately depend on the day-to-day decisions made on the farm. NewStar operation and quality assurance staff remain abreast of basin-wide water management issues and monitor on-farm water usage over time by reviewing annual irrigation records. At the field level, NewStar personnel bring an awareness to minimize water use and they take pride in

employing years of experience in making judgments on when and how much to irrigate.



*Flow meters allow irrigation crews to keep an accurate accounting of water being applied to NewStar crops.*

The investments made in water conservation in Mexicali reflect the company’s strong commitment to advance sustainability in its operations.

**50%**  
PROJECTED  
DECREASE  
IN WATER USE  
PER CARTON

*NewStar expects to use approximately 50% less water per unit harvested on the 600 acres they have converted to drip irrigation.*

# NewStar Fresh Foods: Water Management



Founded in 1996, NewStar Fresh Foods grows and harvests on farms in premier growing regions, and has grown to become a leader in providing superior quality value added produce. NewStar offers a broad line of commodities and its flagship items: green onions, asparagus, and value-added spinach and tender leaf greens. Steeped in innovation, NewStar built a reputation as the innovators of packaged spinach (Fresh Choice® brand), and were pioneers of the development of iceless green onions.

Today, NewStar stands out as the world's largest shipper of iceless green onions. NewStar operates processing facilities in Salinas, California, Yuma, Arizona, and Mexicali, Mexico. NewStar's Mexicali operation—EstrellaNueva—is a major producing region for NewStar green onions and other specialty crops.

For more information, please visit [www.newstarfresh.com](http://www.newstarfresh.com)



The Greener Fields Together National Farm program was launched in 2012, intent to build and manage a supplier network of national farms dedicated to examining sustainability in their operations. Through the completion of *5P's of Sustainability™* Verified Case Studies and reporting, the program will reveal the efforts being made toward more sustainable operations.

Sustainability process areas in the Greener Fields Together National Farm program include:

- Community
- Employee Wellness
- Energy and Climate
- Packaging
- Pest Management
- Soil Management
- Waste Management
- Water Management

The Greener Fields Together effort will demonstrate the commitment farmers are making toward ensuring a future for food.

For more information, please visit [www.greenerfieldstogether.org](http://www.greenerfieldstogether.org)



SureHarvest is an agri-food sustainability solutions company delivering practical strategies, proven technologies, and exceptional services to accelerate financial profitability, environmental stewardship and social progress.

Clients span the agri-food value chain and benefit from SureHarvest's market-leading expertise and experience in the design, execution and verification of sustainability initiatives. Our services are often coupled with farm management and sustainability program management software technologies to provide turnkey solutions.

SureHarvest is the pioneer in adapting business process approaches (e.g. Total Quality Management, Six Sigma, Lean, etc.) to the more variable conditions of farming, harvest logistics, and packing/shipping. Titled the *5P's of Sustainability™*, this business process management approach is used as the principal strategic framework for creating value with our customers.

For more information, please visit [www.sureharvest.com](http://www.sureharvest.com)