



## **Solutions from the Land- Land Based Solutions to Global Challenges**

Over the past decade, through national and regional dialogues, and collaborative action involving hundreds of farmer, forestry, conservation, and environmental leaders, as well as academic, government and business partners, consensus around a new vision for United States agriculture, forestry, and conservation has emerged:

*Farmers, ranchers, and foresters manage land to produce the food, fiber and energy needed to support a growing population and economy, while simultaneously protecting and improving biodiversity, the environment, and public health.*

This vision runs counter to those who argue that our nation and world are land constrained, and it reinforces the critical point that America’s working lands—our farms, ranches and forests—can, in fact, be managed in a way that improves the resiliency of agricultural and forestry landscapes and delivers a host of food, feed, fiber, energy, public health and ecosystems services.

*Solutions from the Land* (SfL), a not-for profit organization formed in 2014, was created to bring this vision to life.

### **Achieving the Vision**

For land to sustainably produce food, feed, fiber, energy, public health and ecosystem services, transformational changes in the way land is managed will be required. The policies and practices of the past will not meet the needs and challenges of tomorrow.

Together with our partners, *Solutions from the Land* is advancing and demonstrating a new land management model in which American agriculture, forestry, and conservation take effective, collaborative steps toward facing twenty-first-century challenges. Rather than managing land through top-down silo programs designed to address individual (e.g. food, fiber, clean water, energy, habitat, health, wildlife, and biodiversity) objectives and/or challenges separately, the SfL model embraces an integrated approach through which multiple public and private sector stakeholders join forces to improve the resiliency of agricultural and forestry landscapes and deliver multiple goods and services. Rather than focusing on outdated policies or searching for “silver bullet” solutions to production or conservation issues, SfL is helping landowners and managers discover examples of innovation across the nation, and adopt pivotal actions that can fundamentally shift land use management toward practices that deliver multiple solutions from the land. The following building blocks define and underpin the SfL model.

## SfL Building Blocks

Under the SfL land management model, stakeholders work collaboratively to:

- 1. Implement landscape-scale solutions and partnerships:** Broader and empowered coalitions of land managers, regulators, scientists, and civil society around agro-forest ecosystems or landscapes must be built to ensure continued production of essential food, feed, fiber, energy, and similar products, while improving the delivery of environmental, economic, and public health values from the land. This multi-stakeholder approach should be the foundation for advancing land use and management policies that meet economic, social, and environmental objectives through consensus-driven solutions. They should also help to set regional objectives for land management and identify the relevant voluntary, and/or regulatory, strategies that will meet those objectives.
- 2. Harmonize policy frameworks:** Land owners and land managers often face regulations and policies that have overlapping or even contradictory objectives, not to mention redundant procedures and paperwork. Collaborative efforts to align policies and balance outcomes at the federal and state level, are essential for sustaining land productivity and reducing implementation and transaction costs for both land operators and public agencies. We must reduce or eliminate conflicting regulations, while also advancing the use of ecosystem service markets and sustainable supply chains as tools to meet policy goals.
- 3. Reward stewardship of ecosystem services:** New markets for ecosystem services have the potential to substitute for conservation payments, but are rarely structured to adequately provide returns comparable to traditional production. Producers are concerned that these markets do not meet all stakeholder demand and/or reflect consumption pressures. Without better clarity on the value of the ecosystem services provided, uncertainty limits the scope for landowner/operator decisions and choices. Land management indices, metrics, and other measurements that are understood by land owners and operators, will be important to allow the social interaction needed for market evolution.
- 4. Energize and coordinate research:** To achieve the goals of *Solutions from the Land*, a reliable base of information and knowledge is needed. Investments in research and innovation must be restored. A designated research council or overarching organization should set a research agenda that integrates agricultural, forest, and conservation goals. Research should be focused on real-life applications and decision makers, with improved methods for transforming research findings into on-the-ground results.
- 5. Transform and modernize information networks:** We need to foster a transparent, widely available system of information networks to both collect and share information with a spectrum of public and private sources. These systems should include a science-based, scale-responsive network to meet the needs of land managers. This requires

moving away from a provider-centric information system, in which research results are communicated outward in the hopes of finding an audience, to a user-centric system, where information is readily available to users when they need and seek it. This work should be accompanied by better monitoring systems for regional-level systems such as air quality, water quality, and biodiversity, with new “meta-metrics” that can serve as broad indicators of sustainability.

## **Next Step: Scale Up and Demonstrate the Value of the Sfl Model (2016-2018 Work Plan)**

Drawing from our experiences and success to date, Sfl is now prepared to provide catalytic leadership in scaling up and broadening agriculture led resiliency initiatives in challenged arenas and regions across the country. By doing so we will showcase the power of multi-stakeholder led and integrated land management initiatives, and set the stage for transformational policy and program changes that will follow. Through our actions we will compare and contrast the “old” (i.e. government centric) and “new” Sfl way of building resilient agricultural and forestry landscapes, and will validate that the wise management of life systems and resources can deliver abundance instead of scarcity.

Towards this end, Sfl will:

- Create, incubate and spin off large landscape scale, multi-stakeholder collaborations that improve the resilience of working agricultural and forestry landscapes and deliver integrated solutions from the land;
- Share knowledge and accelerate learning about resilient and healthy agricultural and forestry ecosystems; and
- Build and nurture alliances to advance the policy, research and market reforms necessary for the Sfl vision to be realized.

### **Initiative One: Demonstrate and Replicate the SFL Land Management Model**

#### **1a. Large Landscape Collaborations**

Sfl will beta demonstrate its organizing and facilitation processes in creating and incubating **three large landscape working land collaborations** in the following regions: upper mid-west, intermountain-west, and south.

Projects will be selected based on their ability to: deliver multiple, integrated solutions from the land (sustainable intensification of production, environmental and public health improvements, climate change mitigation, and biodiversity enhancements); strengthen and refine SfL's multi-stakeholder shared leadership model; embrace new approaches to solving problems; and be replicated in other watersheds/regions. A primary goal of this initiative is to develop a network of large landscape collaborations in different regions of the country that can serve as learning laboratories and centers for developing and supporting SfL champions and mentors who can then help replicate the SfL approach to integrated land management

### **1b Council of Collaborating Partners**

Recognizing that it will take many partners to support and accelerate the implementation of the SfL model, SfL will form a **Council of Collaborating Partners** to improve communication, coordination, and cooperation among government agencies and nongovernmental organizations that share the SfL vision. Initial candidates for the Council include the American Farm Bureau Federation, American Farmland Trust, Council for Agricultural Science and Technology, Ducks Unlimited, EcoAgriculture Partners, Environmental Defense Fund, Farm Foundation, Forest Landowners Association, National Alliance of Forest Owners, National Association of Conservation Districts, National Association of State Conservation Agencies, National Association of State Departments of Agriculture, National Farmers Union, National Sustainable Agriculture Coalition, Partners for Conservation, Practitioners Network for Large Landscape Conservation, The Nature Conservancy, Theodore Roosevelt Conservation Partnership, United Nations Foundation; USDA and USDOJ agencies; U.S. Water Alliance; World Wildlife Fund, donor partners; and others.

### **1c State leadership Roundtables**

SfL will **organize and conduct symposiums and workshops in six states** to introduce landowner and land manager opinion leaders, business, and academic partners and policy makers to the SfL model. States will be selected based on their interest in providing leadership in advancing the SfL model or those that could benefit from its adoption. Initial candidates for these workshops will be states where SfL leaders reside. The desired outcome of these programs is a commitment to endorse and actively participate in a large landscape collaborative SfL project in their state or region.

## **Initiative Two: Share Knowledge/Accelerate Learning**

A second area of focus for SfL during the next three years will be the development of tools and outreach programs designed to share knowledge; accelerate learning; and equip landowners to manage land, water, and other natural resources in an integrated manner and at the scale necessary to meet the multiple challenges of the twenty-first century—global food and energy security, sustainable economic development, public health, biodiversity and climate change.

## **2a. Create National Awareness**

Using its vast network of highly respected agricultural, forestry and conservation leaders and collaborating academic, government and business partners, SfL will initiate and support a grassroots information and education campaign to build thought and opinion leader and policy maker support for the Sfl land management approach. Tactics will include extensive use of social media; drafting and placing opinion pieces in producer publications, professional journals and policy maker news outlets; developing feature articles and video documentaries on Sfl initiatives; facilitating roundtables and discussion forums; organizing a speakers bureau of farmer, rancher and forestry leaders to share Sfl experiences and successes at grower/producer meetings; and showcasing results through a “Sfl farms, forests, ranches and landscapes of the future” recognition awards program. As was successfully done with the 25x’25 renewable energy initiative, Sfl will create and support a Sfl Alliance where groups and organizations that embrace the Sfl vision can collaborate in accomplishing shared objectives and advocate for enabling necessary policies that can accelerate the adoption of the Sfl model.

### Goals:

- i. By 12/31/16 earn 30 opinion leader and 10 editorial board endorsements; recruit 50 Sfl Alliance members;
- ii. By 12/31/17 secure 5 Governor endorsements; grow the Alliance to 100 members;
- iii. By 12/31/18 secure passage of Congressional resolutions embracing Sfl guiding principles and outcomes’ grow the Sfl Alliance to 500 members.

## **2b. Accelerate learning**

To support the scale up of Sfl projects, a virtual learning center will be established. This interactive web based center will be a repository and vehicle for sharing tools, programs, success stories, and financing models project leaders can use to initiate Sfl large landscape projects.

Sfl will also establish a peer-to-peer capacity building training program led by Sfl mentors who have had experience developing and operating integrated land management initiatives across the country. Special effort will be made to partner with related networks such as the Practitioners Network for Large Landscape Conservation. While their focus is primarily around conservation initiatives, their experiences and support tools can be adapted to meet the needs of Sfl’s working lands collaboratives, which by design, seek to manage land to address multiple challenges.

Sfl will also organize and conduct an annual national Sfl Conference focused around a specific topic. Initial candidate subjects include:

- i. Research and Extension Priorities supporting the Sfl vision- the new “Morrill Act”
- ii. Payments for ecosystem services

## **Initiative Three: Build and Nurture Alliances**

SfL provides an agricultural and forestry led platform for delivering land based solutions to global challenges. Using its tax-exempt status under section 501(c) (3) of the Internal Revenue Code, SfL will host and serve as the fiduciary agent for clean energy, climate change, and large landscape working lands collaboratives that align with and further enable the attainment of the SfL vision. Current alliances and collaboratives operating under the wing of SfL are depicted in Annex 2. These include:

- 25x'25 Renewable Energy Alliance
- North American Climate Smart Agriculture Alliance
- North Carolina ADAPT
- Delmarva Land & Liter Challenge
- Native Pollinators in Agriculture
- Southeast Agriculture and Forestry Energy Resources (SAFER) Alliance

Going forward, new alliances spawned by SfL's work will operate as self-directed initiatives under Memorandums of Understanding between SfL and project/initiative leaders.

## **Monitoring Progress and Measuring Success**

Success will be monitored and measured by:

- the number and diversity of agricultural and forestry groups and value chain partners that come together to explore and advance the SfL land management model;
- improvements achieved in agricultural and forestry productivity; environmental quality; human health; and greenhouse gas emission reductions;
- the opinion leaders who commit to work proactively to achieve the policy, research and market reforms necessary for the SfL vision to be realized.

## **Organization**

SfL originated as a Dialogue led by a team of respected agriculture, forestry, conservation, academic, and industry leaders who came together in 2009—as an outgrowth of clean energy discussions facilitated by the 25x'25 Alliance—to explore integrated land management solutions across these sectors that can help meet food security, economic development, climate change, and conservation of biodiversity goals. A key area of focus for SfL was the development of a [Pathways Report](#) highlighting systems that create value and reward farmers for the full range of services they deliver from the land.

*Solutions from the Land*, was incorporated on May 1, 2014 as a not-for-profit corporation focused on land based solutions to global challenges. Today SfL is led by a Board of Directors composed of thought leaders from the agriculture, forestry, conservation sectors and their related academic, industry and value chain partners. For more on *Solutions from the Land*, click [HERE](#).

## **Annex One: More on Solutions from the Land** **SfL Board of Directors and Founding Leaders**

*Solutions from the Land* is guided by a Board of Directors composed of agriculture, forestry and conservation thought leaders. For more information on our Board of Directors and Founding Leaders, please visit our [website](#).

### **Building Support and Demonstrating Success (2005-2015)**

Over the course of the past decade, SfL's leaders have developed and facilitated a number of innovative and impactful multi-stakeholder collaborations in support of the SfL vision. Examples include:



#### **25x'25 Renewable Energy Alliance**

The 25x'25 initiative, led by a National Executive Committee composed of seasoned agricultural, forestry and renewable energy leaders, has evolved into one of the premier renewable energy advocacy campaigns operating in the country today. Backed by a diverse array of over [1,000 endorsing partners](#), [35 current and former governors](#) and [16 state legislatures](#), the 25x'25 Alliance has grown into a powerful coalition united behind the goal of securing 25 percent of the nation's energy needs from renewable sources by the year 2025. A list of 25x'25's major accomplishments since its founding in 2004 can be accessed [HERE](#).

For the past decade, 25x'25 has operated as a self-directed special project of the Energy Future Coalition (EFC), a broad-based, non-partisan alliance that seeks to bridge the differences among business, labor, and environmental groups, and identify energy policy options with broad political support. Under this arrangement, EFC's host organization, the Better World Fund (BWF), a tax-exempt organization under section 501(c) (3) of the Internal Revenue Code, has functioned as 25x'25's sponsor.

While these arrangements have been beneficial to both the EFC and 25x'25, the 25x'25 Executive Committee, in consultation with the EFC, has concluded that the time has come to transition 25x'25 from a special project of the EFC, to a special project of *Solutions from the Land* (SfL).

For the 25x'25 goal to be realized, 25x'25 champions must rally, unite and go on the offensive driving home the good news about renewable energy and the economic, environmental, national security, and public health benefits that these burgeoning biofuel, bioenergy, solar, wind, geothermal, and small scale hydro industries are providing to the nation. For rural America, renewable energy is too big to fail. This will be 25x'25's core mission in the second decade of leadership and will require new funding partners and hard work to attain the 25x'25 national energy goal.



### **North American Climate Smart Agriculture Alliance (NACSAA)**

Using its proven convening and facilitation skills, SfL leaders brought a diverse collection of agricultural, conservation, and scientific organizations together as founding partners of the North American Climate Smart Agriculture Alliance (NACSAA). Through this Alliance, farm leaders, along with public and private sector, and industry value chain partners, are collaborating in developing ways to improve the resilience of production systems, as well as adapt and mitigate present and future risks from changing climatic conditions. This new Alliance, which will interface and collaborate with the Global Alliance on Climate-Smart Agriculture, provides North American agricultural and forestry leaders with several platforms for shaping an integrated approach for simultaneously pursuing the three pillars of climate-smart agriculture: 1) sustainably increasing agricultural productivity and livelihoods (i.e. sustainable intensification); 2) adapting and building more resilience; and 3) delivering ecosystem services, and reducing and/or removing greenhouse gas emissions.

The Alliance is composed of over 50 [Partner](#) organizations and is led by a 28 member [Steering Committee](#). A [Formation Plan](#) has been developed, and a three year climate change engagement program is nearing finalization.



### **Delmarva Land & Litter Challenge**

Through the new [Delmarva Land & Litter Challenge](#), which operates under the wing of *Solutions from the Land*, a diverse group of organizations representing grain producers, chicken growers, poultry integrators, conservationists, academic partners; along with agribusiness, finance, and service providers are joining forces and collaborating on a new way forward for managing poultry related nutrient pollution on the Delmarva Peninsula. Together they developed [New Approaches to Poultry Litter Management in the Chesapeake Bay Watershed: Win-Win Pathways for Agriculture and the Bay](#) and have committed to provide catalytic leadership in accomplishing the following outcomes and goals:

***Delmarva farmers and their agri-business partners are respected stewards of the land, guardians of natural resources and champions of the rural cultural heritage in the Chesapeake Bay watershed. By 2025:***

- ***Delmarva agriculture is regionally neutral in importing and exporting nutrients, and wherever possible, nutrients are recycled locally to support sustainable agricultural operations; and***
- ***Nutrients are utilized in farming operations without negative environmental impacts.***



## **North Carolina ADAPT**

Through this initiative, SfL worked with, and through, highly respected and well-networked agriculture and forestry thought leaders and organizations in North Carolina to engage farmers, foresters, and ranchers on the topic of adaptation. The North Carolina Agriculture and Forestry Adaptation Work Group leaders concluded that the risks associated with changing climatic conditions warrant expanded and accelerated adaptive management planning and they produced [Keeping North Carolina Farms and Forests Vibrant and Resilient: An Adaptive Management Planning Strategy](#). In August 2015 the Work Group hosted an Ag/Forestry Adaptation Summit and invited agriculture and forestry leaders along with conservation, agribusiness, academia, industry, and government partners to join with them in identifying risk management tools, production and conservation practices, as well as research and extension priorities that can be used to ensure that production platforms remain resilient and economically viable. [Statement of NC-ADAPT Work Group Co-Chairs Concluding Ag, Forestry Adaptation Summit](#).



## **Native Pollinators in Agriculture**

The goal of this SfL project, which was established in 2006, is to expand and intensify current pollinator protection efforts, specifically by focusing on making the agricultural community a full partner in pollinator protection efforts. The initiative is led by the Native Pollinators in Agriculture Work Group, comprised of highly respected agricultural and conservation leaders along with beekeepers and entomologists.

In 2007, the Project developed a report that, for the first time, presented findings and recommendations developed by individuals who produce or support the production of food, feed, and fiber. [Enhancing Pollination Services and Profitability: An Opportunity for U.S. Agriculture](#) highlights the contributions of native pollinators to agriculture and outlines the actions needed to increase agricultural productivity and profitability by enhancing pollination services provided by both managed and native pollinators.

More recently, NPIA has disseminated information about success growers have achieved using native pollinators to supplement the pollination services provided by managed pollinators; produced and placed [Grower Success Stories](#) in producer magazines and newsletters highlighting results from managing for pollinators; held state agency workshops in Maryland/Delaware, Washington, Michigan, Montana, Indiana, Arkansas/Oklahoma, Utah and West Virginia to harmonize efforts of federal, state, and local conservation programs to work together to integrate pollinator protection and habitat enhancement goals into programs; conducted ag media field days in Florida, California and Massachusetts; and Arranged for America's Heartland (AH) PBS series to produce a feature show focusing on Native Pollinators and related conservation habitat. AH has produced over a half-dozen stories on the importance of bee pollination to U.S. agriculture, the growing crisis around Colony Collapse Disorder, and the efforts to discover the causes and provide solutions. Their most recent episode can be viewed [HERE](#).



### **Southeast Agriculture and Forestry Energy Resources (SAFER) Alliance**

SfL leaders facilitated the formation of the [Southeast Agriculture and Forestry Energy Resources \(SAFER\) Alliance](#) in 2006. This alliance is working to position the South as a national leader in the bioeconomy. SAFER works toward this vision by providing strategic leadership in advancing initiatives related to biopower, biofuels, and bioproducts. These initiatives focus on better policy, targeted research, efficient commercialization, and outreach and education. In 2008, SAFER merged with the Southern Alliance for the Utilization of Biomass Resources (SAUBR).

## **SfL Guiding Principles**

In support of integrated solutions to accomplish our vision, SfL embraces:

- Increasing production on working lands while providing a broad range of value-added goods and services, including ecosystem services and improvements in public health;
- Protecting and restoring high-value conservation areas and conserving biodiversity;
- Landscape-scale planning that balances production and conservation;
- Consensus-based decision making that respects the values and views of participating stakeholders;
- Thinking and acting on multiple scales: farm, landscape, regional and global;
- Tailoring solutions to meet the unique values, needs, assets, and limitations of developed and developing countries;
- Technology that will enhance production, human capacity and the efficient use of resources and inputs, and reduce pollution and waste;
- Effecting change through policy, voluntary initiatives, and consumer awareness campaigns, including: mitigation markets, government payments, mandated purchases, buyer-to-buyer arrangements;
- Market-based solutions that reward innovation and incentivize healthy land use;
- Establishing benchmark goals, measuring progress, and evaluating results; focusing on outcomes, not just practices and programs;
- Multi-stakeholder collaborations (producers, businesses, foundations, as well as government and nongovernmental organizations);

- Expanded research and extension outreach work on integrated land management solutions;
- Systems that reward incremental progress towards bold goals;
- Equity among stakeholders, while breaking the historic relationships amongst stove-piped interests and land use objectives; and
- The importance of recognizing private property rights.

## **SfL Outcomes**

SfL partners envision a future that is significantly different from the past:

- Productivity is increasing in ways that protect and improve biodiversity, the environment, and public health and provide the full range of needed ecosystem services.
- Landowners and managers are making more efficient use of inputs, reducing waste and overall consumption of natural resources.
- Farmers, ranchers, foresters, and other land managers are supported and compensated for their stewardship of ecosystems and the ecosystem services the land provides, such as clean water and air, wildlife habitat, biodiversity, and carbon sequestration.
- Communities are engaged constructively at the policy level to participate with land owners and managers in resolving competing priorities in their own home landscape.
- Policy decisions about land use and land management at all levels reflect the results of multi-stakeholder assessment and negotiation, so that regulatory frameworks support, rather than inhibit, sustainable land management.
- Integrated land use approaches are the major framework for planning and are incorporated into policy statements and initiatives.
- There is increased public sector funding for an integrated land use agenda.
- Cross-agency collaboration, resource-sharing and regulation alignment are widespread.
- Research institutions are re-organized to serve integrated solutions from the land.
- Market mechanisms are in place that encourage and incentivize farmers and the private sector to manage ecosystems sustainably.
- The U.S. is playing a key role in promoting integrated land use policy internationally.

**Annex Two: SfL- a 501 (c) (3) not-for profit organization.**

