

Implementing the National Seed Strategy

NATIONAL SEED STRATEGY FOR REHABILITATION AND RESTORATION



VISION

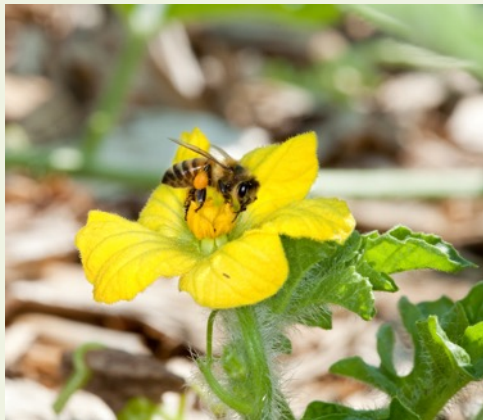
The right seed in the right place at the right time.

MISSION

To ensure the availability of genetically appropriate seed to restore viable and productive plant communities and sustainable ecosystems.

2017

Seed Strategy Supports National Priorities



Healthy native plant communities provide the infrastructure to support:

- **The Nation's economy,**
- **Energy independence,**
- **Jobs in rural communities,**
- **Outdoor recreational activities,**
- **Healthy wildlife populations,**
- **Clean air and clean water,**
- **And life itself!**

National Seed Strategy for Rehabilitation and Restoration

VISION

**The right seed in
the right place at
the right time.**

MISSION

**To ensure the
availability of
genetically
appropriate seed
for healthy and
productive plant
communities.**



WHY Do We Need a Strategy?

NATIONAL SEED STRATEGY FOR REHABILITATION AND RESTORATION

VISION

The right seed in the right place at the right time.

MISSION

To ensure the availability of genetically appropriate seed to restore viable and productive plant communities and sustainable ecosystems.



Why Do We Need a Seed Strategy?

Building Resiliency on our American Landscapes

- **Altered plant communities are less resilient to extreme weather events.**
- **Emergency preparedness includes increased use of native seeds and plants.**



Why Do We Need a Seed Strategy?

Nature's Infrastructure



Healthy native plant communities are part of nature's infrastructure that can lessen the impacts of severe weather – i.e. wind, wildfires and floods -- helping to protect people, homes and businesses in emergency situations.

Why Do We Need a Seed Strategy?

Wildfire and Sage-Grouse Habitat



- In the West, more than 1.4 million acres of sage-grouse habitat burned in 2017.
- In only the past 3 years, 2.6 million acres of sage-grouse habitat have burned
- There is not enough seed to restore all of these areas

Why Do We Need a Seed Strategy?

Restoration Needs Exceed Seed Supplies

Yet, there is a critical shortage of native seed to protect and restore American landscapes on a large scale.



Example: Four years after Hurricane Sandy, many eastern coastal areas still need restoration.

Implementing the National Seed Strategy will help meet demand for locally adapted native seed for large-scale restoration efforts.

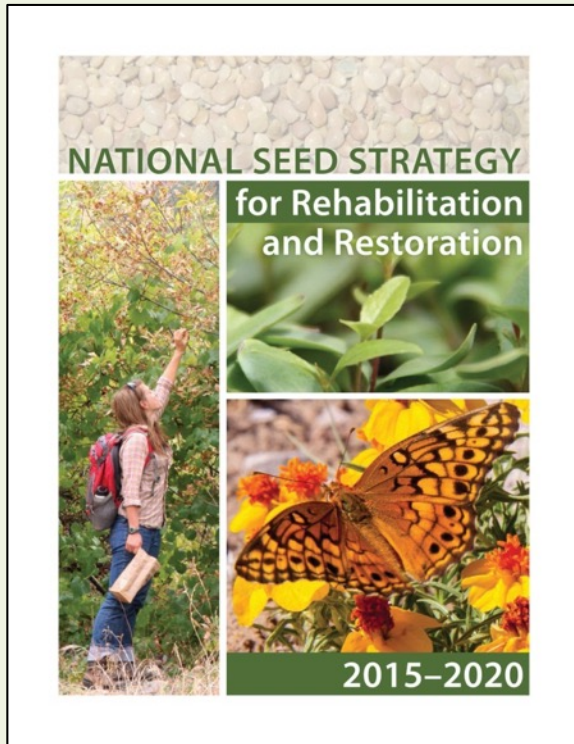


Seed is A Critical Natural Resource

- **Seed is a critical natural resource that has been largely unrecognized, unprotected, and undermanaged.**
- **Locally adapted seed sources are vital.**
- **There is a shortage of locally adapted seed available when and where it is needed.**

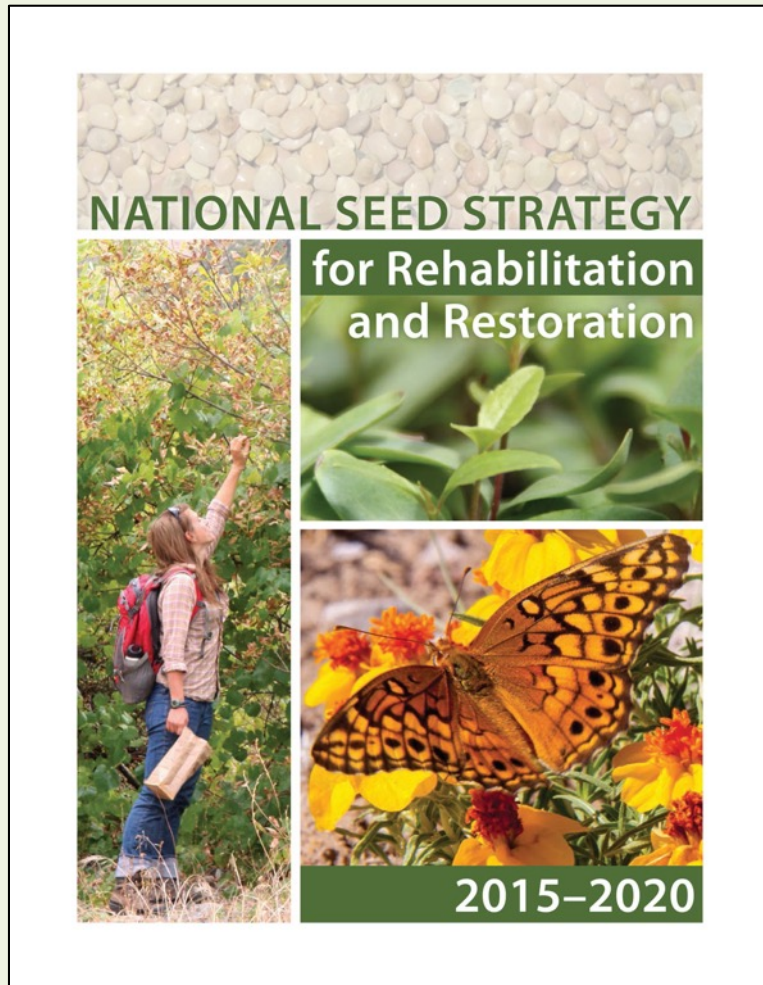


The Challenge is Huge



- **The National Seed Strategy was developed to address this need.**
- **It takes a coordinated, strategic approach to ensure that native seed is available when and where it is needed.**
- **It brings together 12 Federal Agencies and more than 350 other organizations.**

National Seed Strategy for Rehabilitation and Restoration



- **Signed in August 2015**
- **Calls for an Unprecedented Level of Collaboration**
- **Developed by the Plant Conservation Alliance (PCA)**
- **U.S. - Only country in the world with a National Seed Strategy**

Plant Conservation Alliance Federal Committee



12 Federal Agencies 
Federal Committee – led by BLM

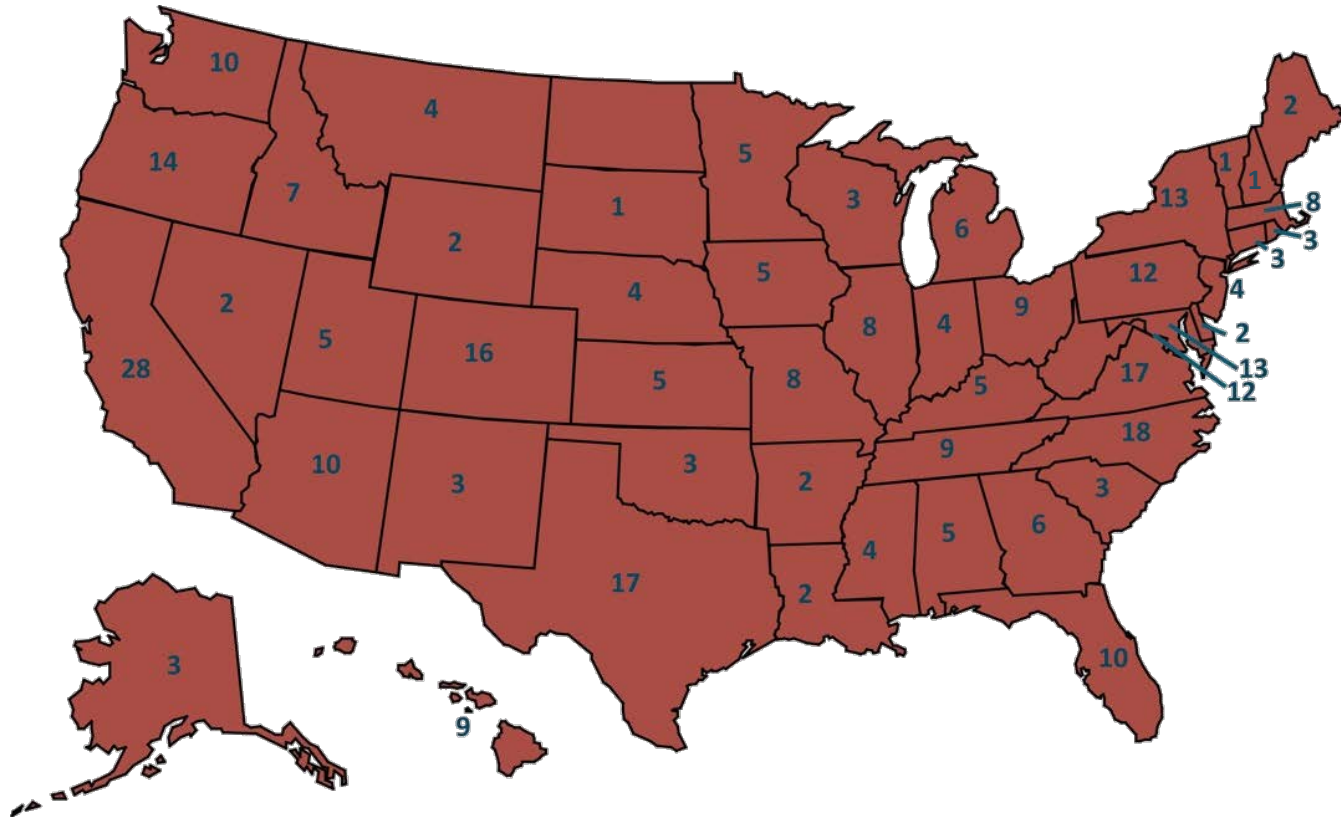
PCA also includes

- 350 Nonfederal Partners
- 9 International Partners

MEMORANDUM OF UNDERSTANDING
among the
BUREAU OF INDIAN AFFAIRS
and the
BUREAU OF LAND MANAGEMENT
and the
FEDERAL HIGHWAY ADMINISTRATION
and the
NATIONAL PARK SERVICE
and the
SMITHSONIAN INSTITUTION
and the
U.S. BOTANIC GARDEN
and the
USDA AGRICULTURAL RESEARCH SERVICE
and the
USDA FOREST SERVICE
and the
USDA NATIONAL INSTITUTE OF FOOD AND AGRICULTURE
and the
USDA NATURAL RESOURCES CONSERVATION SERVICE
and the
U.S. FISH AND WILDLIFE SERVICE
and the
U.S. GEOLOGICAL SURVEY
ESTABLISHING THE
FEDERAL NATIVE PLANT CONSERVATION COMMITTEE
OF THE PLANT CONSERVATION ALLIANCE

This Memorandum of Understanding (MOU) is made and entered into by and between the Bureau of Indian Affairs, Bureau of Land Management, Federal Highway Administration, National Park Service, Smithsonian Institution, United States Botanic Garden, United States Department of Agriculture (USDA) Agricultural Research Service, USDA Forest Service, USDA National Institute of Food and Agriculture, USDA Natural Resources Conservation Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey, hereinafter referred to as the Committee.

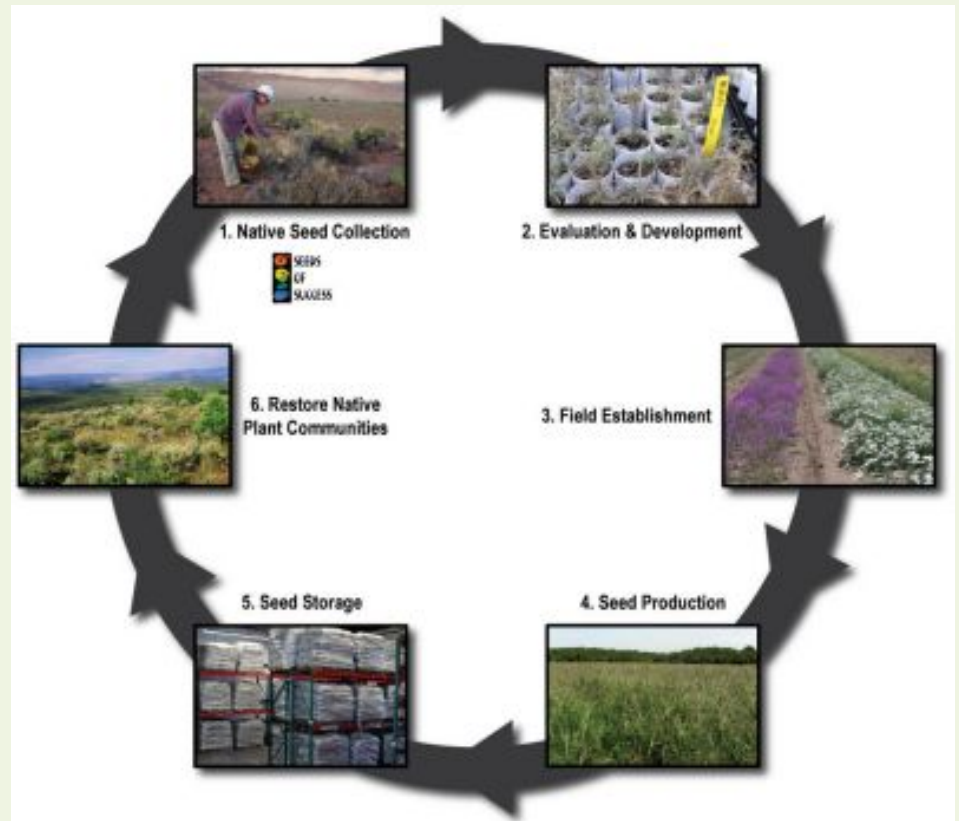
Plant Conservation Alliance 360 + Nonfederal Cooperators



Strategy Builds on 15+ Years of Work

Congress created Native Plant Materials Development Programs in response to catastrophic wild fires in 1998 and 1999

The BLM and Forest Service have been working toward these goals since 2001.



Success Looks Like ...

Nationwide Networks of

- **Collectors to collect seed,**
- **Researchers to develop seed,**
- **Farmers to grow native seed,**
- **Nurseries and seed storage facilities to supply native seed, and**
- **Restoration ecologists who know how to “put the right seed in the right place at the right time.”**



Seed Strategy Goals



- ❖ 1. Assess Seed Needs Nationwide
- ❖ 2. Conduct Research
- ❖ 3. Develop Tools for Land Managers
- ❖ 4. Ensure Good Communications

GOAL ONE: Assess Seed Needs

“IDENTIFY SEED NEEDS AND ENSURE THE RELIABLE AVAILABILITY OF GENETICALLY APPROPRIATE SEED.”

INCLUDES

- **Targeting infrastructure investments.**
- **Increasing wildland seed collection and production.**
- **Expanding cooperation and partnerships.**
- **Creating a network of native seed reserves and storage facilities. (Federal, tribal, state, local, and private)**

GOAL TWO: Conduct Research

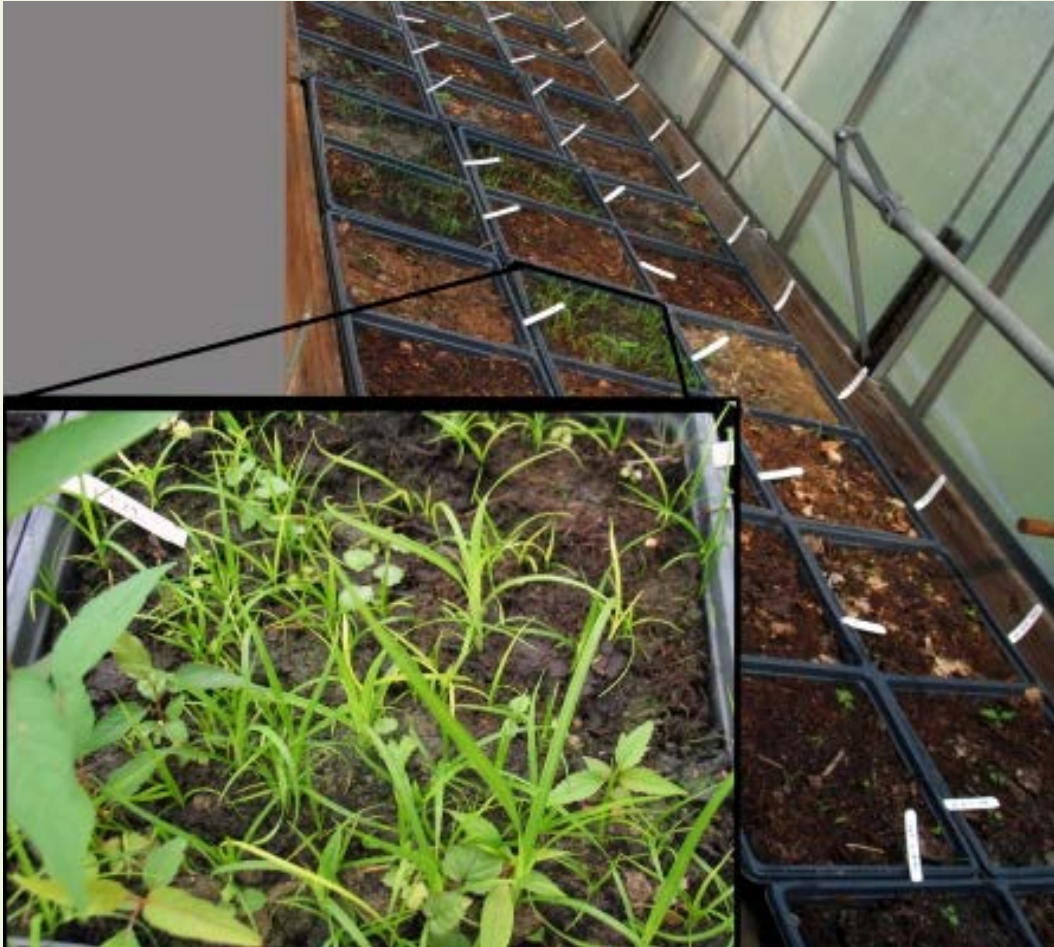
“IDENTIFY RESEARCH NEEDS AND CONDUCT RESEARCH TO PROVIDE GENETICALLY APPROPRIATE SEED AND TO IMPROVE TECHNOLOGY FOR NATIVE SEED PRODUCTION AND ECOSYSTEM RESTORATION.”



INCLUDES

- **Developing and testing seed zones.**
- **Developing reliable protocols for seed testing, storage, and production.**
- **Defining effective restoration, monitoring strategies.**

GOAL TWO: Conduct Research



Research results will inform development of tools for land managers, so they may

- **Select the best seed for restoration**
- **Use the best planting strategies, and**
- **Better predict plant distributions.**

GOAL THREE: Tools for Land Managers

“DEVELOP TOOLS THAT ENABLE MANAGERS TO MAKE TIMELY, INFORMED SEEDING DECISIONS FOR ECOLOGICAL RESTORATION.”

INCLUDES

- **Training on the use of genetically appropriate seed.**
- **Creating new channels for sharing information.**
- **Developing data tools to inform seed selection.**
- **Developing guides on restoration strategies.**

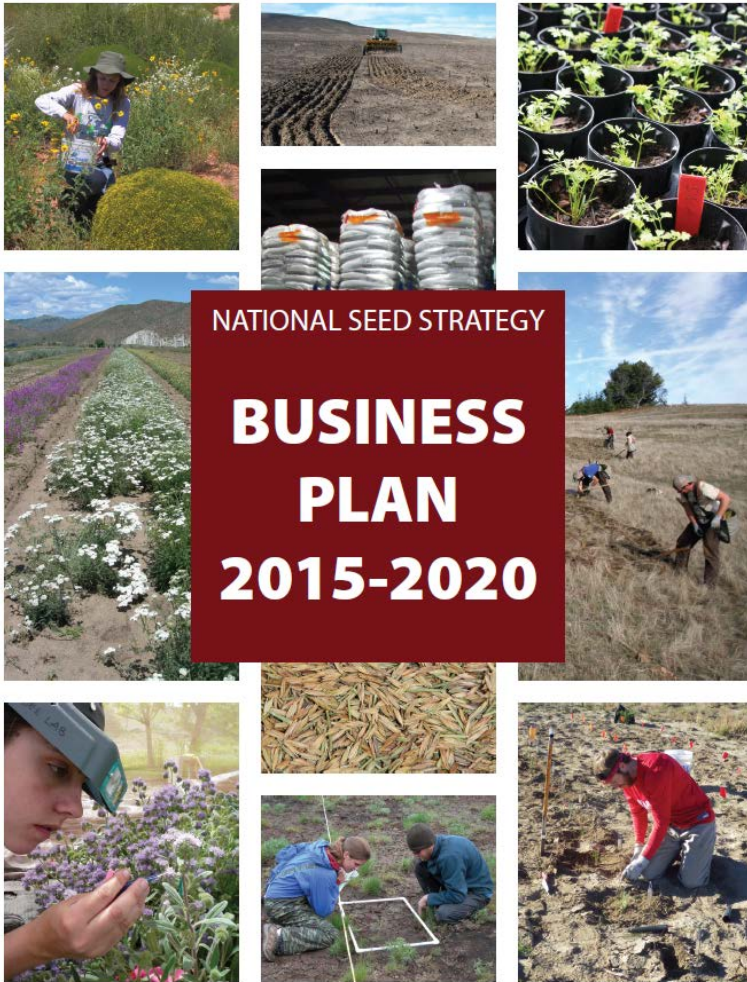
GOAL FOUR: Ensure Good Communications

“DEVELOP STRATEGIES FOR INTERNAL AND EXTERNAL COMMUNICATIONS.”

INCLUDES

- **Developing and Implementing Communication Strategies.**
- **Reporting on Progress.**
- **Recognizing Achievements.**
- **Evaluating Effectiveness.**

National Seed Strategy Business Plan



Estimated Costs 2015-2020

Goal 1 \$131,850,000

Goal 2 \$197,210,000

Goal 3 \$26,205,000

Goal 4 \$2,925,000

Estimated Total Cost: \$358.2 million
 Divided by 5 years = \$71.6 million/year
 Divided by 12 agencies = \$6 million
 per agency per year

National Seed Strategy Implementation

- **Business Plan – Nov., 2015**
- **Leadership Implementation Workshop – March, 2016**
- **Communication Plan – June, 2016**
- **Interagency Implementation Team Charter – September, 2016**
- **Developed several agency budgets for 2017 and 2018**
- **Preliminary Work for National Assessment of Seed Needs, Capacity & Infrastructure**
- **Sponsored 2017 Native Seed Conference, Washington, DC**



Moving Forward

❖ REVIEW

- ❖ **Many large landscapes are in need of restoration.**
- ❖ **This requires a reliable supply of genetically appropriate native seed.**
- ❖ **Full implementation of the National Seed Strategy will provide seed when and where it is needed.**

❖ TO MAKE IT HAPPEN

- ❖ **Strong leadership**
- ❖ **Active coordination**
- ❖ **Sustained support**



© G.A. Cooper

National Seed Strategy

FOR MORE INFORMATION:

WWW.BLM.GOV/SEEDSTRATEGY

TO HELP IMPLEMENT:

WRITE TO: SEEDSTRATEGY@BLM.GOV

TO CONTACT PEGGY OLWELL:

POLWELL@BLM.GOV

202-912-7273

THE END

NATIONAL SEED STRATEGY FOR REHABILITATION AND RESTORATION

VISION

The right seed in the right place at the right time.

MISSION

To ensure the availability of genetically appropriate seed to restore viable and productive plant communities and sustainable ecosystems.

