U.S. Department of the Interior
Bureau of Land Management

Plant Conservation & Restoration Program (PCRP)

Native Plant Materials and Financial Instrument Update

ESR State Leads Mtg. Boise, ID
June 4-6, 2019

Anne Halford, BLM Idaho State Botanist and Rico Galvan,
Administrative Seed Specialist, BLM National Seed Warehouse

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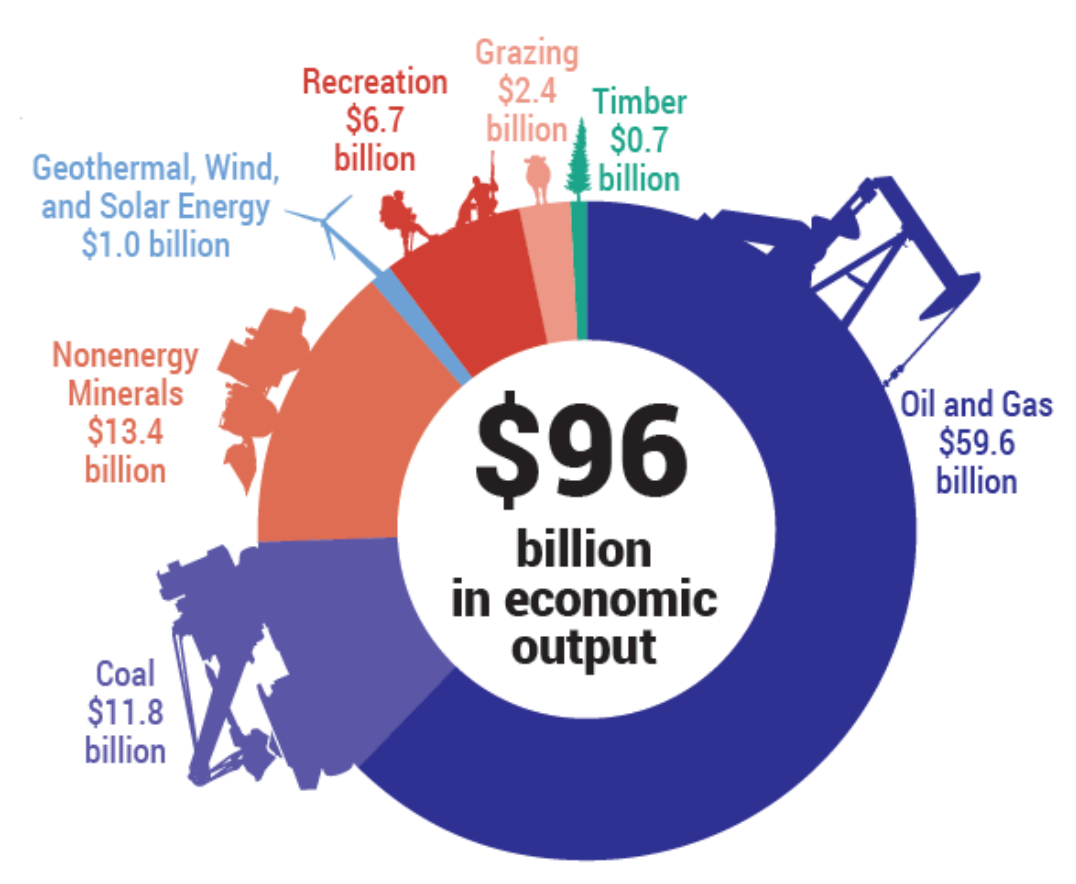
Key Topics

- BLM and DOI priorities
- Where is the seed needed
- Plant materials development process
- West-wide seed increase IDIQ contract
- Seed warehouse purchases
- Leveraging complimentary programs

Plant Conservation & Restoration Program Focus

Healthy and sustainable plant communities across public lands through the right seed in the right place at the right time to ensure BLM can meet its multiple use mandate.



Fiscal Year 2018

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DOI & BLM PRIORITIES

- Restore after wildfires and invasive species
  - Supports SO 3372, DOI
  - Priority to create conservation legacy
- Reestablish productivity for livestock grazing, wildlife, and recreational use
  - Supports SO 3356, SO 3362, SO 3353, SO 3347, DOI Priority to increase revenues
- Develop materials for reclamation of disturbance from oil & gas, minerals and rights-of-ways
  - Supports DOI Priority on appropriate energy development

Congressional Direction for Plant Conservation & Restoration Program

The House Report for the FY2001 Interior (DOI) Appropriations **directed the BLM (and USFS) to develop a long-term program to manage and supply native plant materials** for use in Federal land management restoration and rehabilitation.

FY2017 Direction

National Seed Strategy.—The Committee acknowledges **the successful creation of a National Seed Strategy** and, of the funds provided for wildlife management, **$5,000,000 is to begin implementation of the Strategy**, which is expected to expand efforts to respond with restoration resources to landscape-scale ecological changes due to drought, invasive species and catastrophic wildfires.

FY2019 Direction

Plant Conservation Program. **– The Committee is pleased the Bureau's plant conservation program is back on track and no longer experiencing delays in distributing funds.** The Committee expects no additional delays in program implementation in fiscal year 2019 and encourages the Bureau to focus on increasing the availability of appropriate seed to address high-priority restoration needs and to collaboratively work with other Federal agencies, States, researchers, and private partners to implement the strategy.

Economic Benefits of Plant Conservation and Restoration

- Native plant materials from local populations survive and establish 2.7 times better than nonlocal native seed (Germino, Moser and Sands 2019).
- $20,000-$40,000 per well pad saved by using effective restoration techniques (Norton and Strom 2013).
- PCRP works with the native seed industry to increase native seed supply for ESR, ~$37 million spent on ESR projects will provide the best outcomes for wildlife (Public Lands Statistics 2017).
- Native plants provide preferred habitat for game species, supporting the $345 million spent by hunting on BLM lands (BLM 2018).
- $23 million brought in by recreation fees in FY17, the 2017 Super bloom of native wildflowers increased visitation at Carrizo Plains National Monument by 3500%, (Public Lands Statistics 2017).

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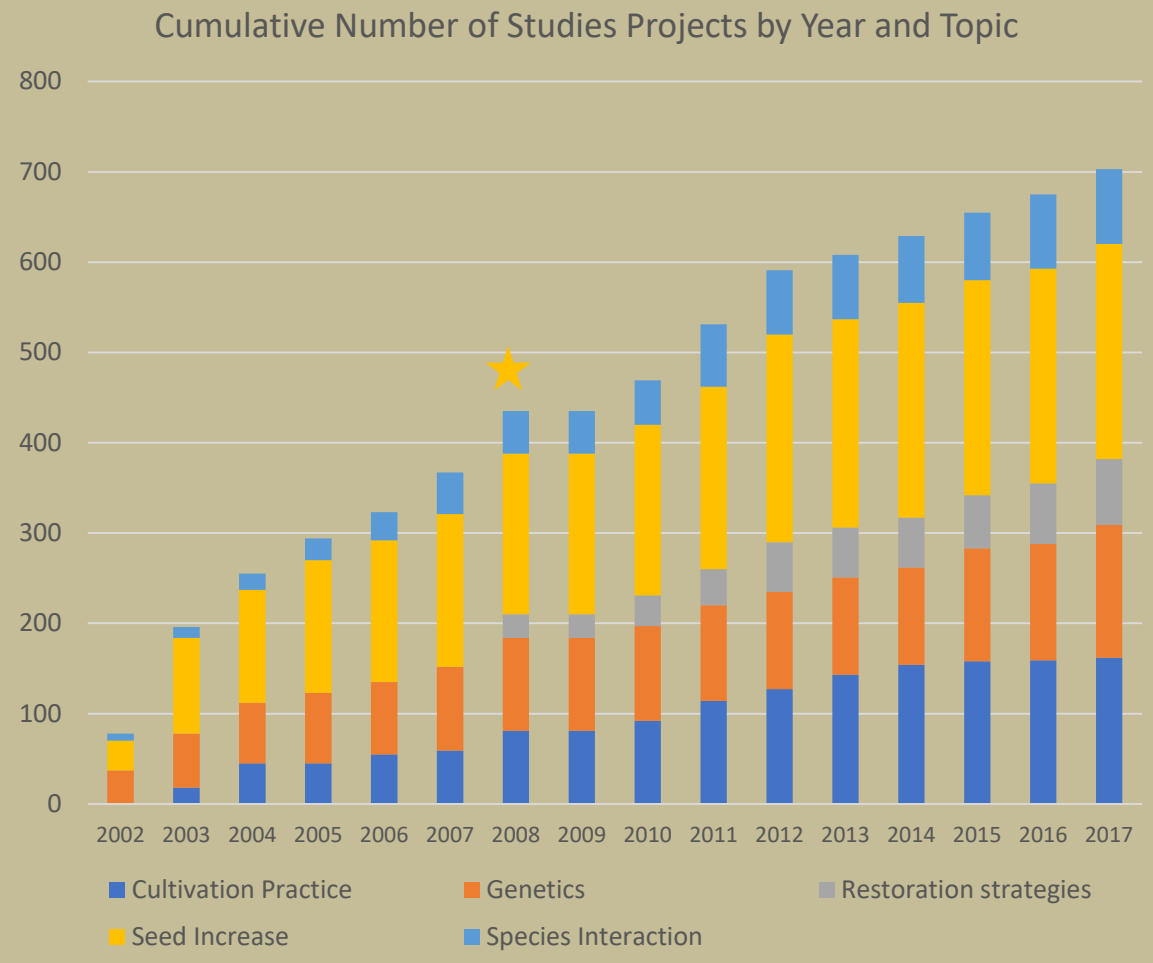
BLM Seed/Plant Material Needs

- Wildfire Rehabilitation
- Emergency Preparedness (natural disaster restoration)
- Restoration of areas dominated by invasives
- Wildlife & Game Habitat Restoration
  - Mule Deer - Bitterbrush
  - Sage-Grouse – Sagebrush
- For required stabilization and reclamation of disturbance from authorized uses

Great Basin Native Seed Work (2002-2017)

Genus	130
Species/taxa	308

Average years of work per taxa	Years
Cultivation Practices	4.9
Genetics and Adaptation	2.8
Restoration strategies	3.0
Seed Increases	4.0
Species Interactions and Ecology	3.2



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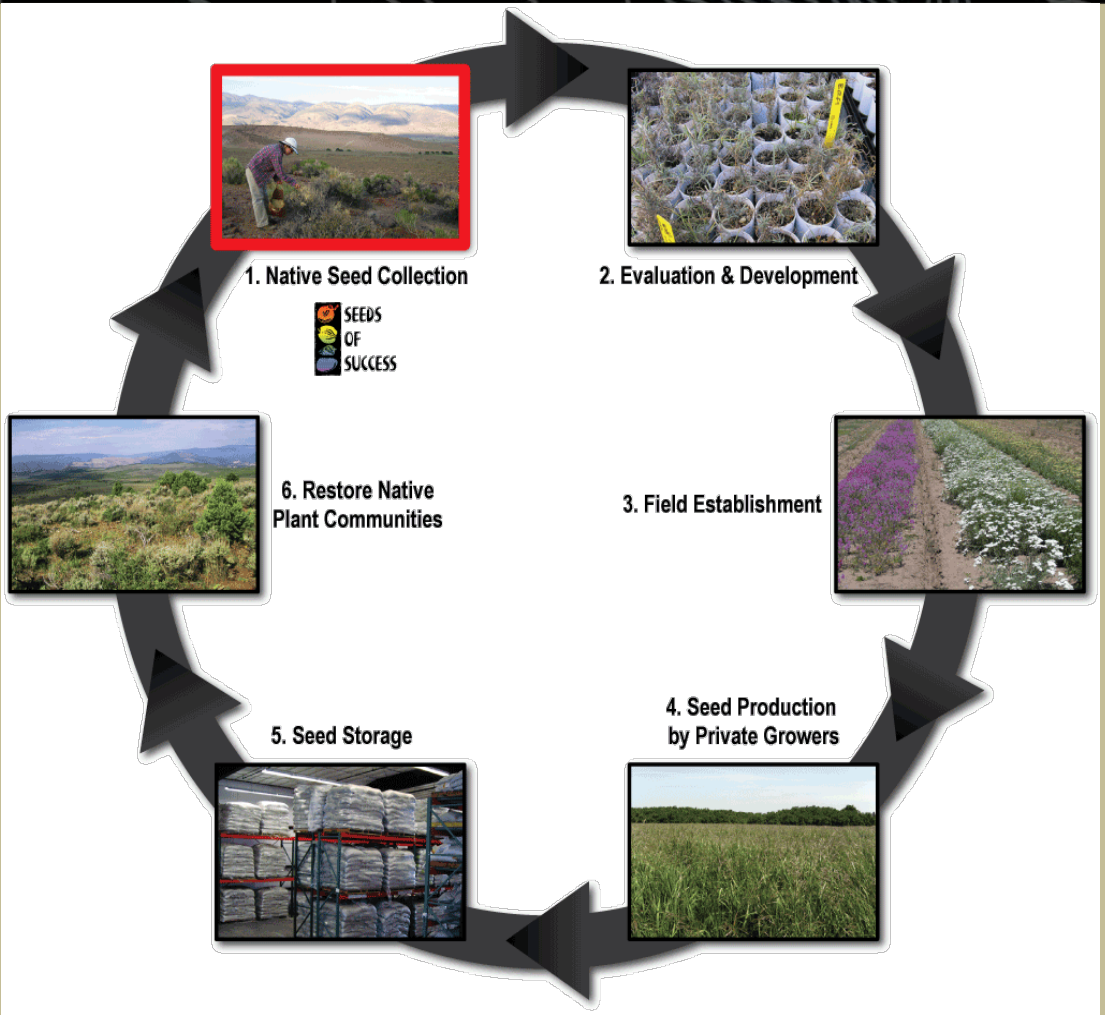
BLM Native Plant Materials Development Process



National Seed Strategy (2015) Goals and Objectives




- Goal 1 – Identify Seed Needs, and Ensure the Reliable Availability of Genetically Appropriate Seed

  Objective 1.3 - Increasing the Supply and Reliable Availability of Genetically Appropriate Seed

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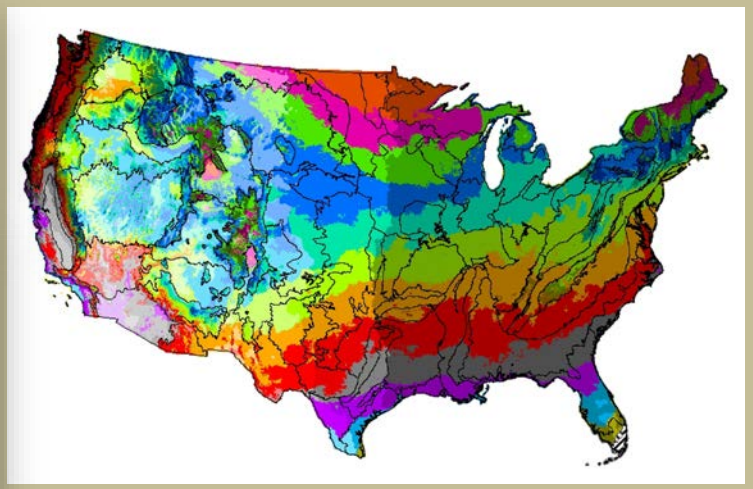
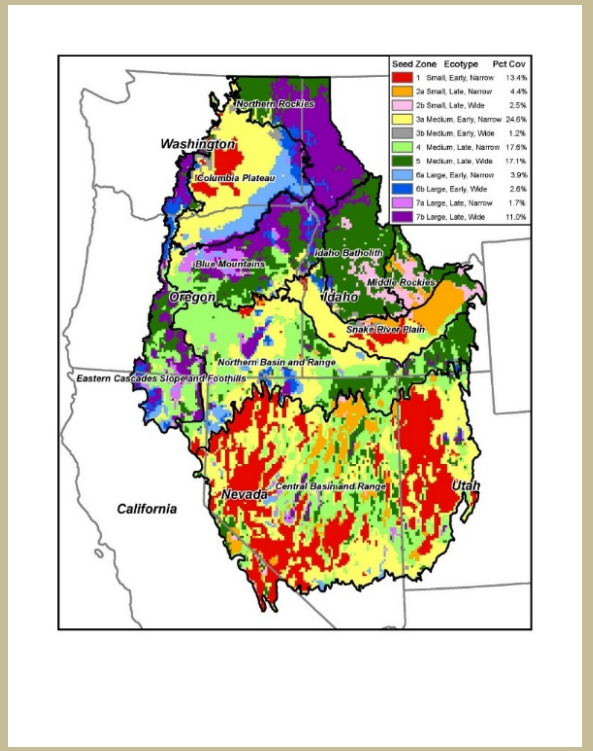
Seed Source – Importance and Leveraging of Existing Data and Tools



U.S. Provisional Seed Zones (PSZ)
Bower *et al* 2013

WWETAC Seed Zone Layers
https://www.fs.fed.us/wwetac/threat-map/TRMSeedZoneData.php

BLM AGOL Seed Transfer Zones

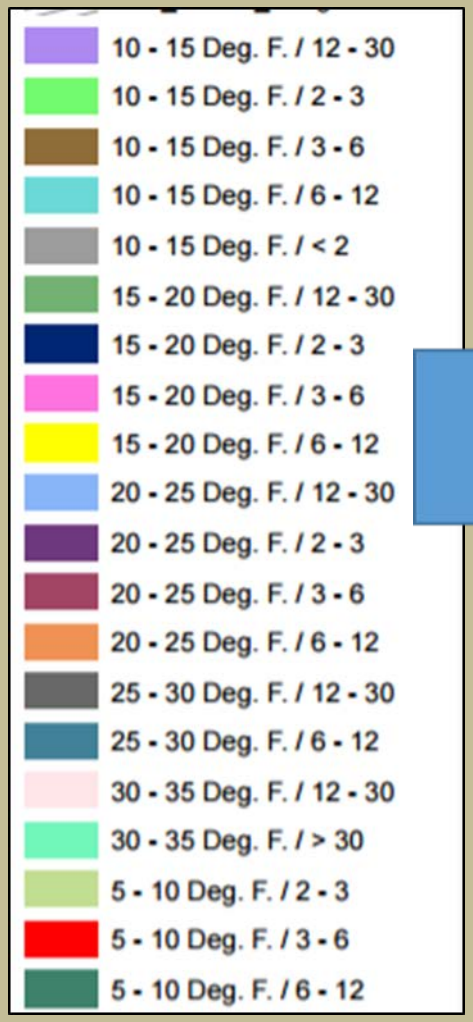


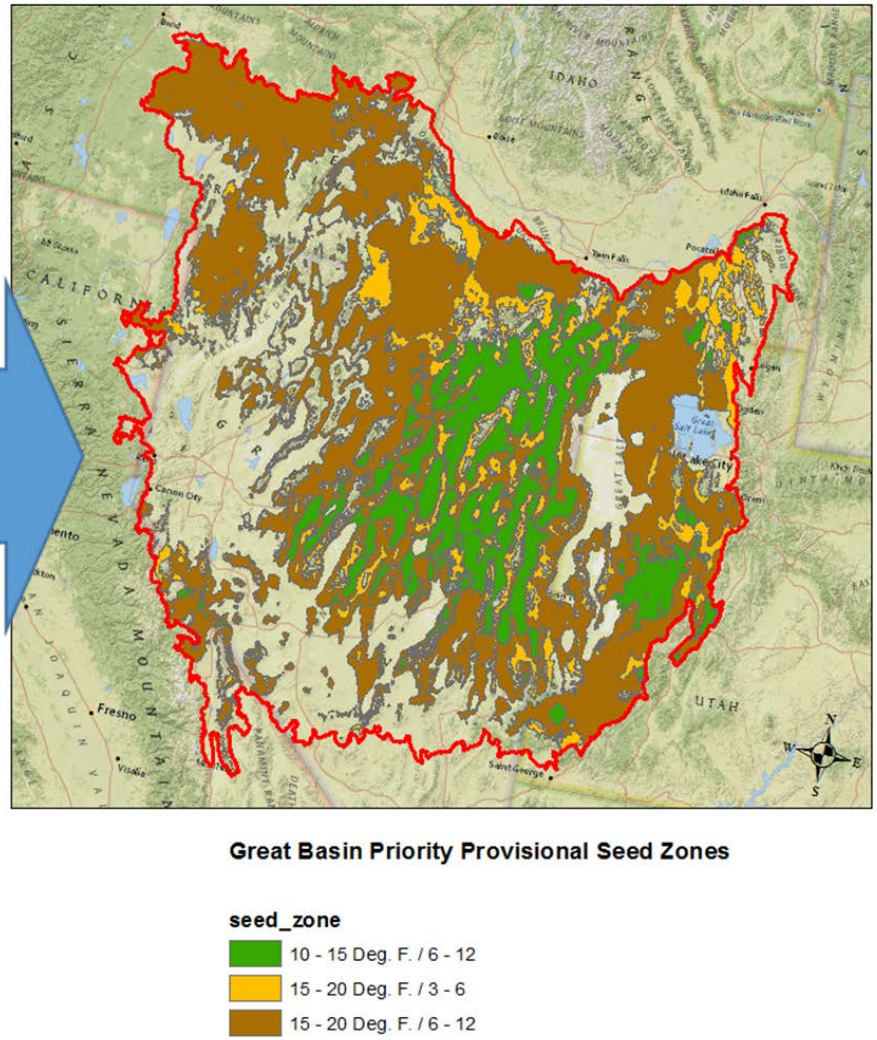
St. Clair et al. (2013)

Empirical Seed Zone - blue bunch wheatgrass

Great Basin Provisional Seed Zone Analysis

- From 20 Provisional Zones to 3
- Covers approximately 75% of the GB
- Using Sage-grouse Priority Habitat and fire history
- Using Bower et al 2013





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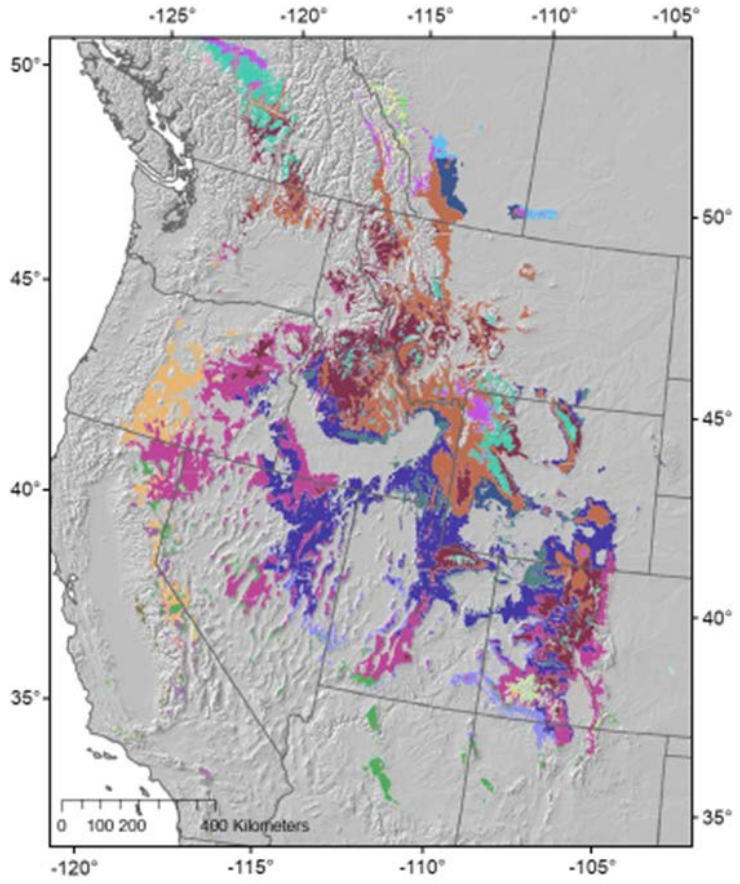
Empirical Sagebrush Seed Transfer Zones

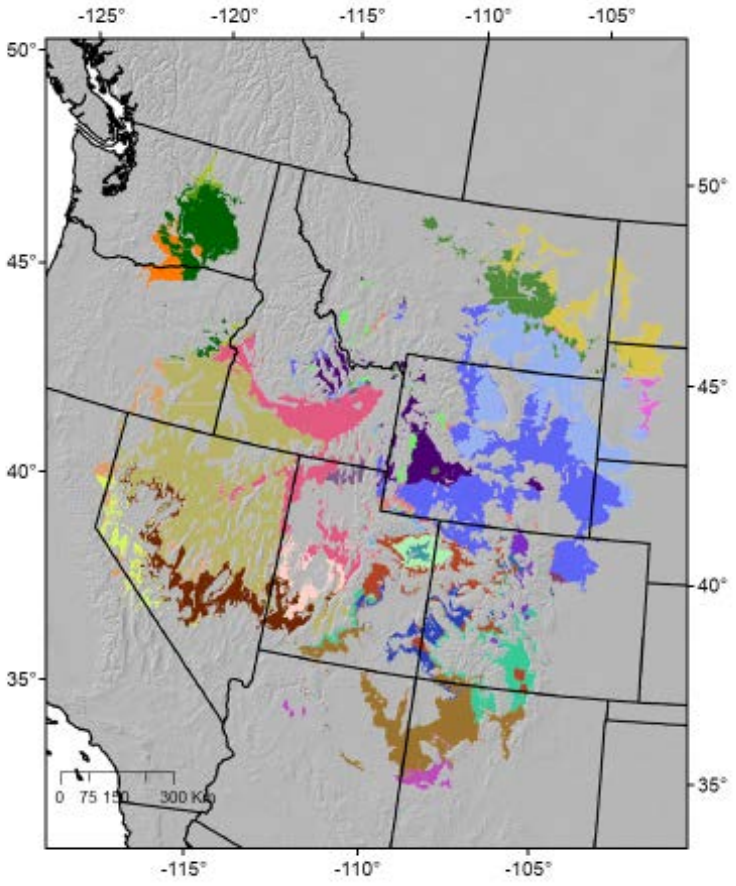


Mtn. big sagebrush

Richardson, B. A., & Chaney, L. (2018)

Wyoming big sagebrush

Still, S. M., & Richardson, B. A. (2015)



Seed Needs Assessment and seed collection using SOS protocols

Multiple collections/species within a seed transfer zone

Each accession cleaned and tested (BSE)

Accessions determined for increase and certified by State seed certifying agency

Certified seed distributed to a vendor (BSE)

Increased seed grown by producer (vendor), field certified and delivered to RSW

Seed tested, and tracked via Regional Seed Warehouse system as x species from y seed transfer zone

Field Offices seed requested by species and seed transfer zone

Seed tracked, applied on project site and monitored using research agreements/contracts

Nat'l Seed Strategy - Goal 3, Objective 3.2. Action 3.2.4

Develop and enhance existing Federal interagency agreement and procurement tools to facilitate multiagency seed acquisition.

Native Grass and Forb Seed Increase IDIQ (Indefinite Delivery, Indefinite Quantity) Contract

- Allows land management agencies to obtain genetically appropriate seed
- Includes 6 commercial growers west-wide
- Includes 42 grass species and 70 forb species
- Reduces production risks for seed industry

Background

- BLM and other federal agencies/partners have a long-term need to obtain genetically appropriate seed for rehabilitation and restoration of Public Lands
- BLM has a need for increased species diversity for habitat restoration
- Relying on only wildland collections to meet our seed needs increases risks to plant populations and reduces innovations in native seed production
- BLM has a need to increase geographic scope, grower diversity and capacity
- The new solicitation/contract provides the Financial Instrument for the commercial seed industry to facilitate, streamline and ensure the reliable availability of this native seed




General Scope

- To procure and increase source identified seed following seed transfer zones within 8 ecoregions
- All seed delivered to the Government shall be source identified (SI) certified native seed under the AOSCA certification program for Pre-Variety Germplasm (PVG).
- The Government will provide SI stock seed for seed increase to meet quantities stated in the delivery order.




Multiple Award (MA), Indefinite Delivery, Indefinite Quantity (IDIQ) Contracts

- 140L0618D0034 – Benson Farms, Inc.
- 140L0618D0035 – Granite Seed Company
- 140L0618D0036 – Great Ecology & Environments, Inc.
- 140L0618D0037 – Oregon Wholesale Seed Company
- 140L0618D0038 – Pacific Northwest Natives
- 140L0618D0039 – S & S Seeds Inc.




Ordering Procedures

- Contract Ordering Period: September 21, 2018 – September 20, 2023
- Maximum Program Ceiling $49M – total aggregate of all contracts
- Authorized Ordering Offices within the BLM to include Alaska, Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming
- Ecoregion/State Botany Leads required to coordinate delivery order requirements through the contract IDIQ Contracting Officer Representative
- NOC Contracting Office will execute all delivery order awards

https://blmspace.blm.doi.net/oc/sites/nocacq/Lists/IDIQServicesSupplies/Allitems.aspx




Procedures for Other Federal Agencies to Use IDIQ

- Via Interagency Agreement (IAA)
- Another office within BLM would be responsible for accepting the IAA
- NOC could not designate another agency COR so someone in BLM would have to be the point of contact (POC) for the action
- POC would be responsible for ensure requirements package is submitted appropriately




IDIQ Contracting Office Contacts

- Contracting Officer:
  Theresa Coffenberry, tcoffenberry@blm.gov, 303-236-5437
- Contract Specialist:
  April Blodgett, ablodgett@blm.gov , 303-236-9433
- Contracting Officer's Representative:
  Ricardo Galvan, rgalvan@blm.gov, 208-373-3836
- Technical Representative
  Anne Halford, ahalford@blm.gov, 208-373-3940

Native Seed IDIQ Production Contract

Plant Conservation and Restoration Program

$1,300,000 (starting capital)

FY19 Funds Needed

Potential Programs:

Fire & Fuels	Recreation
Wildlife & Sage Grouse	NCL
T&E	Minerals
Forestry	Oil & Gas
Range	Lands & Realty
	Riparian

Working Capital Fund
Native Seed Production Contract Subaccount (Self-sustaining)

Funds from seed purchases

Funds for seed production

National Seed Warehouse System

Contract for Local Native Seed Production from State & Ecoregional Delivery Orders

Local native seed

FO funds for local native seed

Local native seed

Field Office Projects

- Fire Rehab
- Fuels
- Wildlife
- Sage-Grouse
- T&E
- Forestry
- Range
- Recreation
- NCL
- Minerals
- Oil & Gas
- Lands & Realty
- Riparian

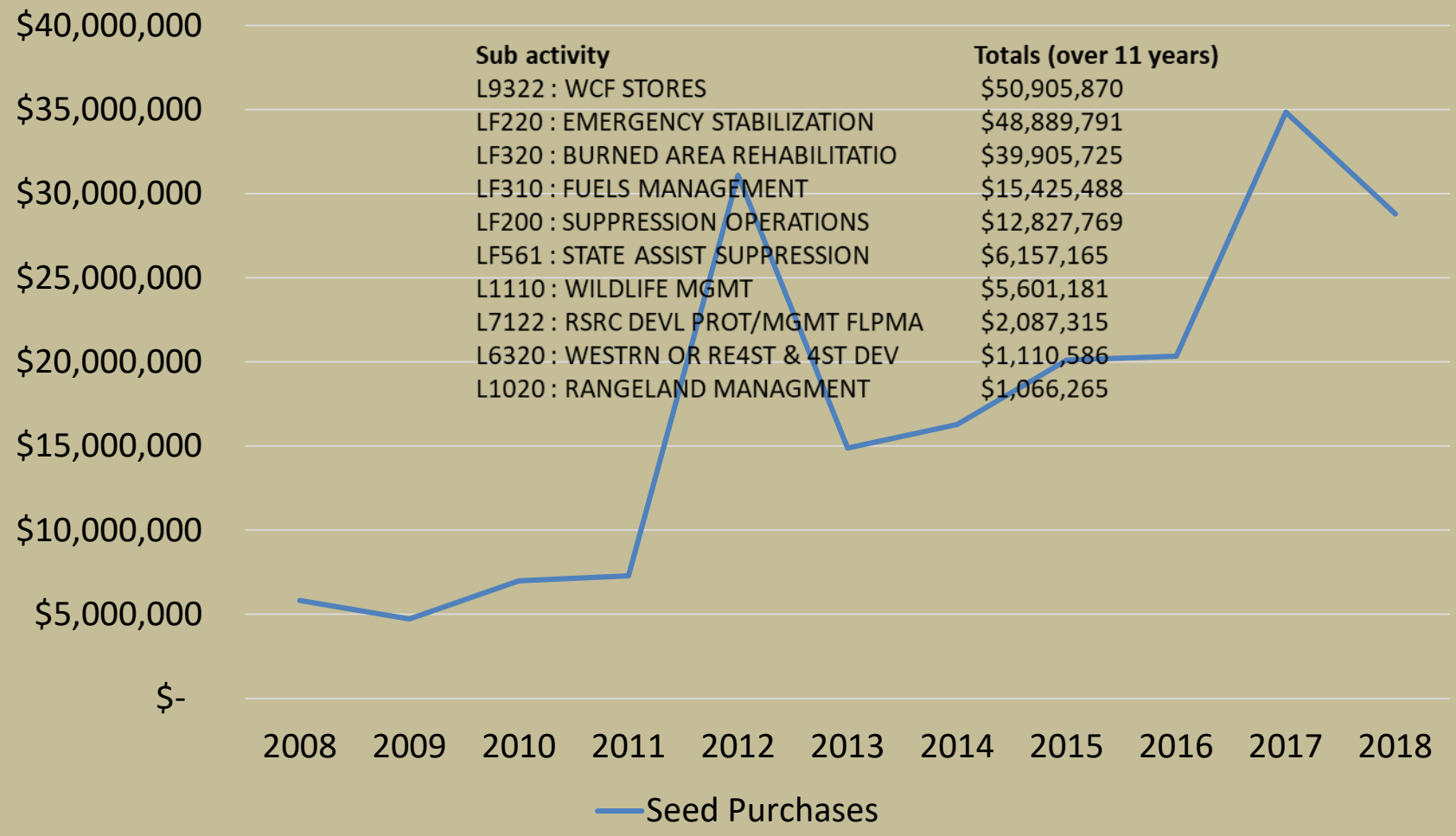
Key

- Appropriated $
- $ from seed sales
- Native seed

2019 Seed Increase Delivery Orders

Number of Species	Number of Accessions	Life Form	Estimated pounds of Production by 2021	Ecoregion
4	4	Grasses	3,500	Colorado Plateau
1	1	Forbs	500	Colorado Plateau
5	5	Grasses	3,500	New Mexico
2	4	Forbs	1,000	New Mexico
2	4	Grasses	1,650	Mojave
4	9	Forbs	750	Mojave
6	31	Forbs	1,000	GB - Idaho/Oregon
7	27	Grasses	7,000	GB - Nevada
3	4	Forbs	1,000	GB - Nevada
2	5	Grasses	5,500	Rocky Mountains
2	4	Forbs	300	Rocky Mountains

BLM Total Seed Purchases
(2008-2018)



Sub activity	Totals (over 11 years)
L9322 : WCF STORES	$50,905,870
LF220 : EMERGENCY STABILIZATION	$48,889,791
LF320 : BURNED AREA REHABILITATIO	$39,905,725
LF310 : FUELS MANAGEMENT	$15,425,488
LF200 : SUPPRESSION OPERATIONS	$12,827,769
LF561 : STATE ASSIST SUPPRESSION	$6,157,165
L1110 : WILDLIFE MGMT	$5,601,181
L7122 : RSRC DEVL PROT/MGMT FLPMA	$2,087,315
L6320 : WESTRN OR RE4ST & 4ST DEV	$1,110,586
L1020 : RANGELAND MANAGMENT	$1,066,265

BLM National Seed Warehouse System

- Approximately $20 million spent annually on seed **through consolidated seed buys**
- 2.4 million pounds, on average, of seed purchased annually through seed buys
- Serves 40 BLM Field Offices in 11 Western States & Partners
- 1-2 million pounds of additional seed purchased by lessees & other partners (NDOW, FWS, IDFG, DOD, USFS)
- 65 to 75 private seed vendors
- 430 jobs supported by BLM seed purchases

BLM National Seed Warehouse System

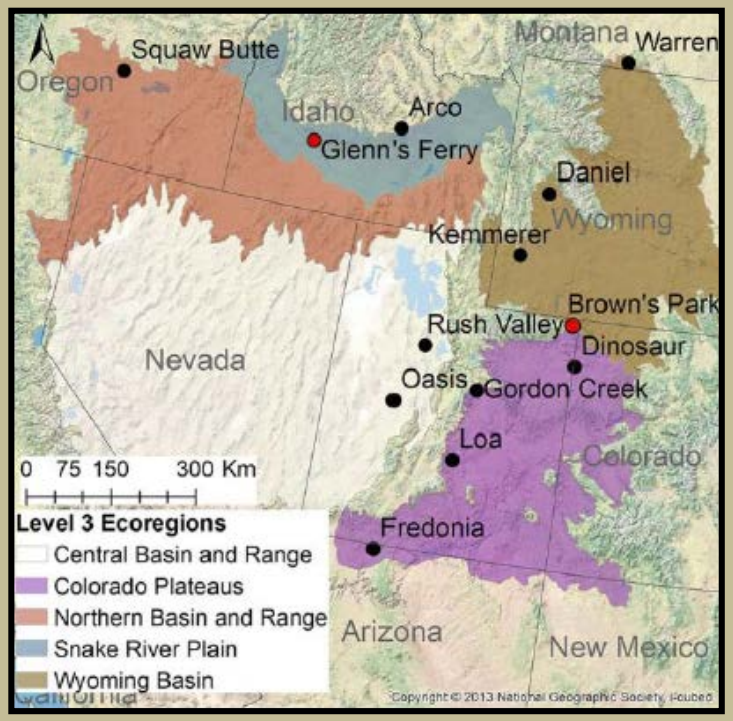
Native LBS	Introduced Non-Native LBS	Combined LBS	Consolidated Buy	Year of purchased
283,855	294,110	577,965	FY 18-1	2018 Spring Buy
550,420	322,950	873,370	FY 18-2.1	2018 Fall Buy
149,855	18,225	168,080	FY 18-2.2	2018 Fall Buy
468,600	127,950	596,550	FY 18-2.3	2018 Fall Buy
1,452,730	**763,235**	**2,215,965**		
65.56%	**34.44%**	100%		

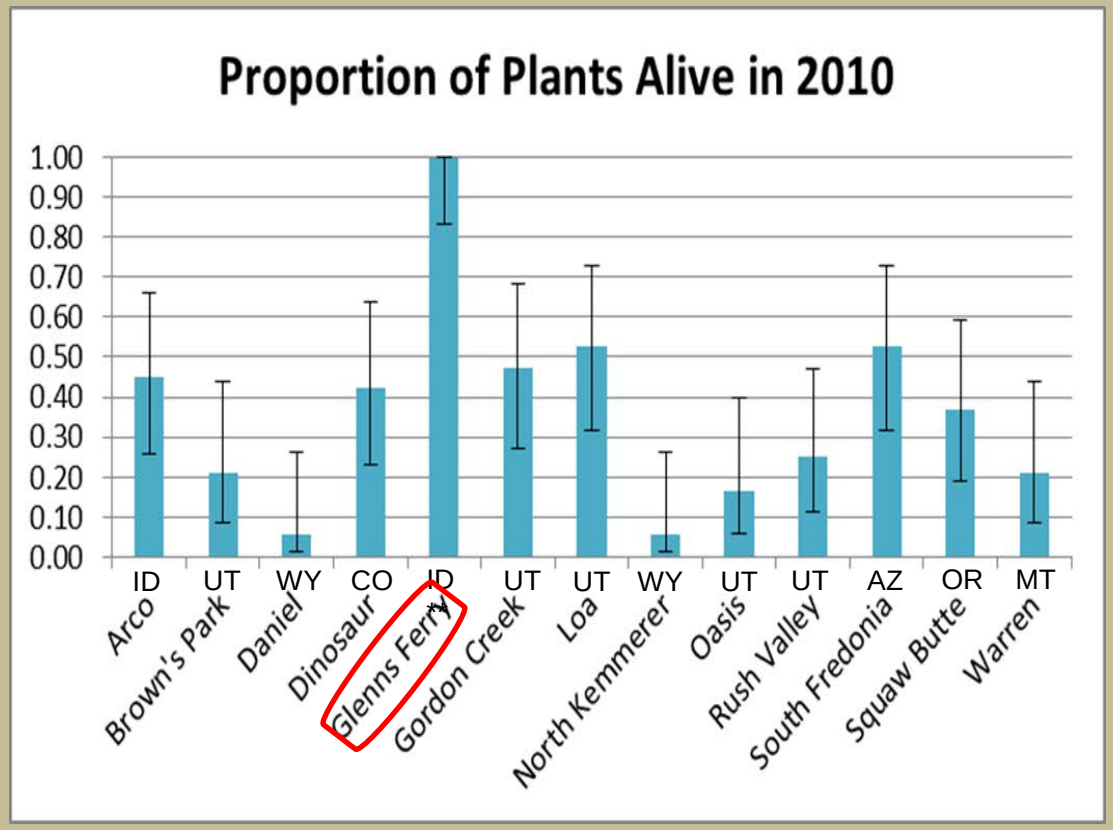
What Seed is Used Now for Restoration in the Great Basin?

- Mostly grasses
- Mostly cultivars from the northern, wetter edges of the Great Basin
- Selected for agronomic and forage traits
- Shrubs and forbs are mostly wildland collected

Why choose locally adapted native seed?

(*Artemisia tridentata* spp. *wyomingensis*)

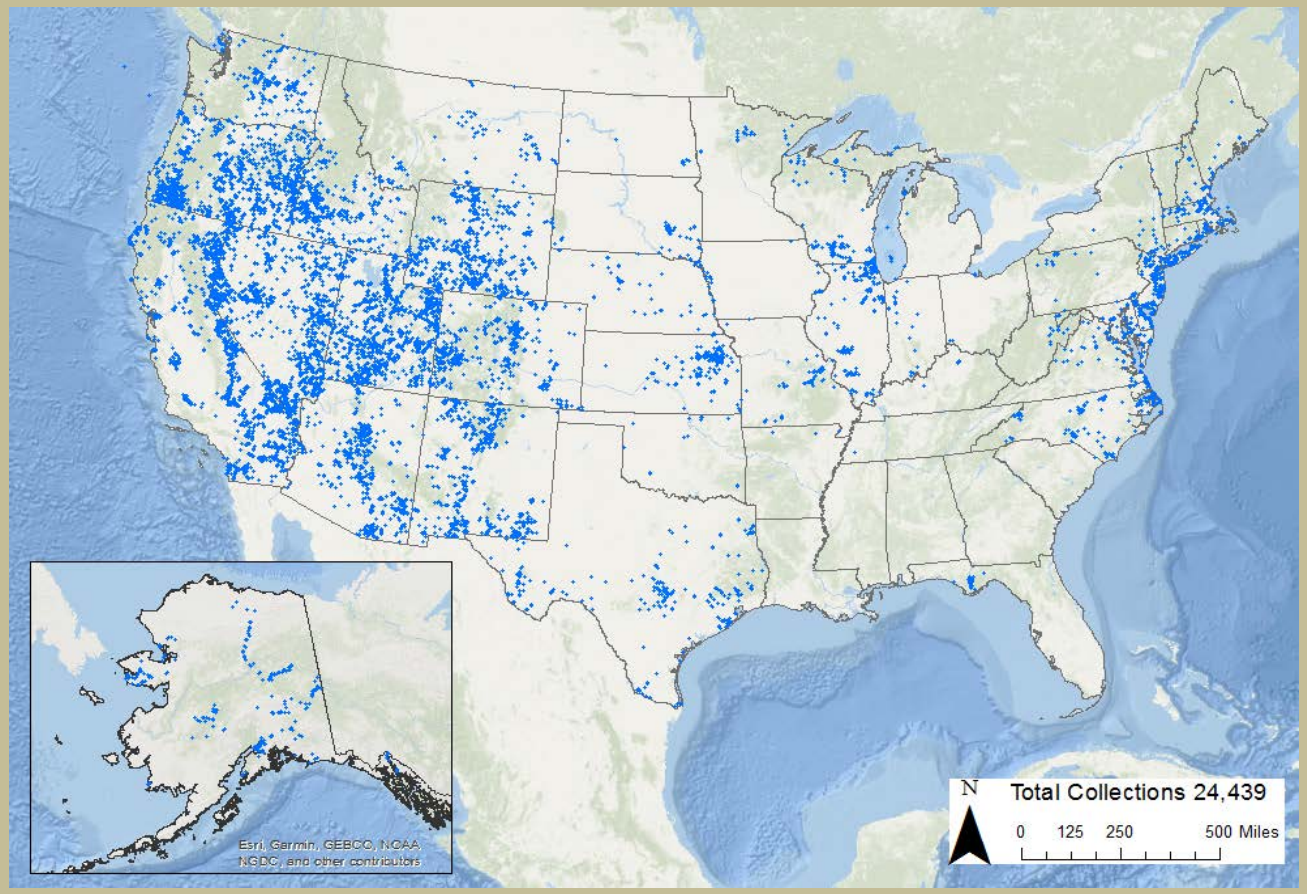




Sands & Moser, 2012

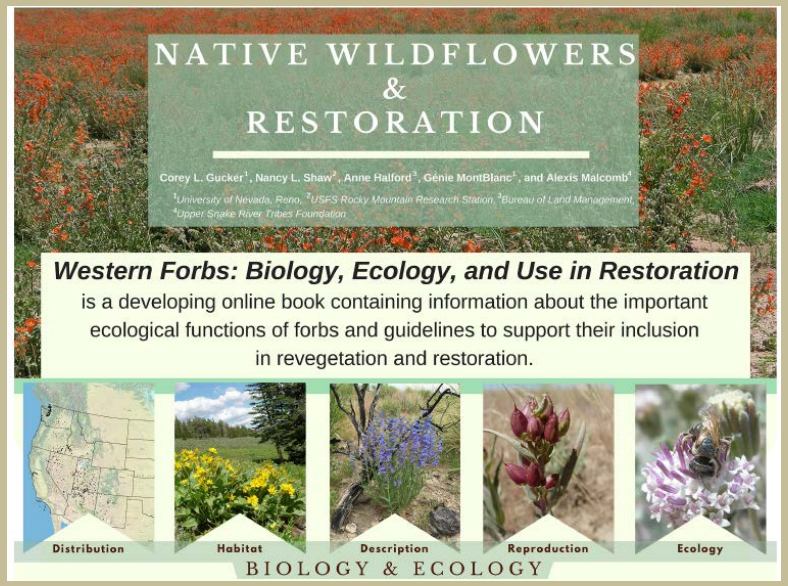
Seeds of Success (2000-2018)

- Total Collections 24,400
- Unique Taxa 5,550
- 1,150 Genera
- 93 Ecoregions represented

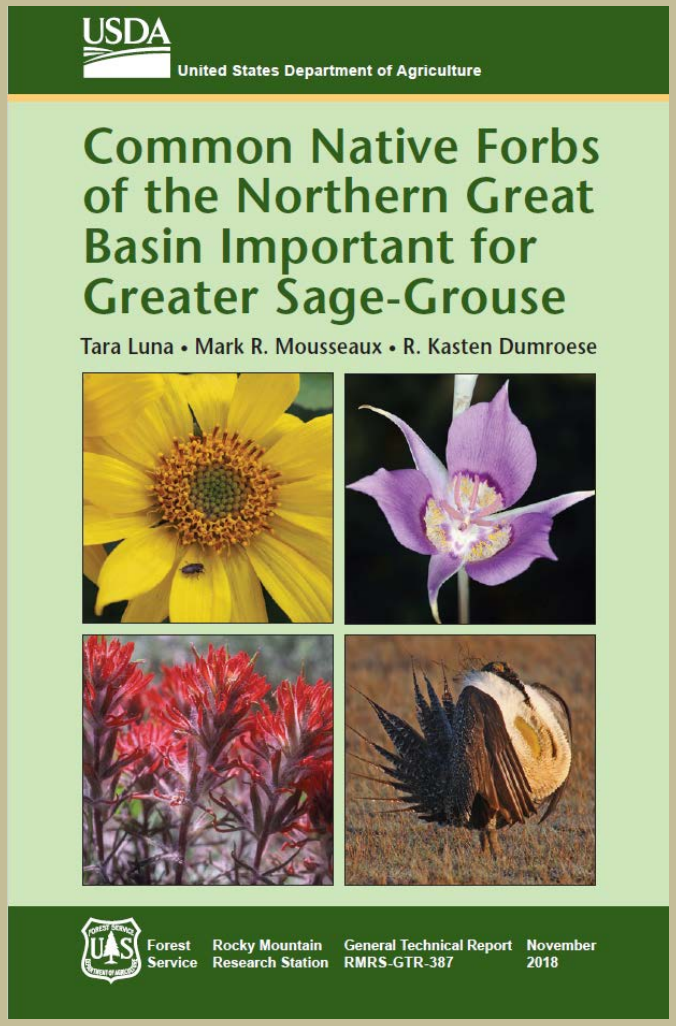


Big Game Priority Areas and Seeds of Success Collections - 2541 collections from big game priority areas in the West. Those priority areas cover 181,152 sq. miles

Additional Tools Available for Sagebrush-Steppe Restoration



https://www.blm.gov/programs/natural-resources/native-plant-communities/native-seed-and-plant-material-development



Questions