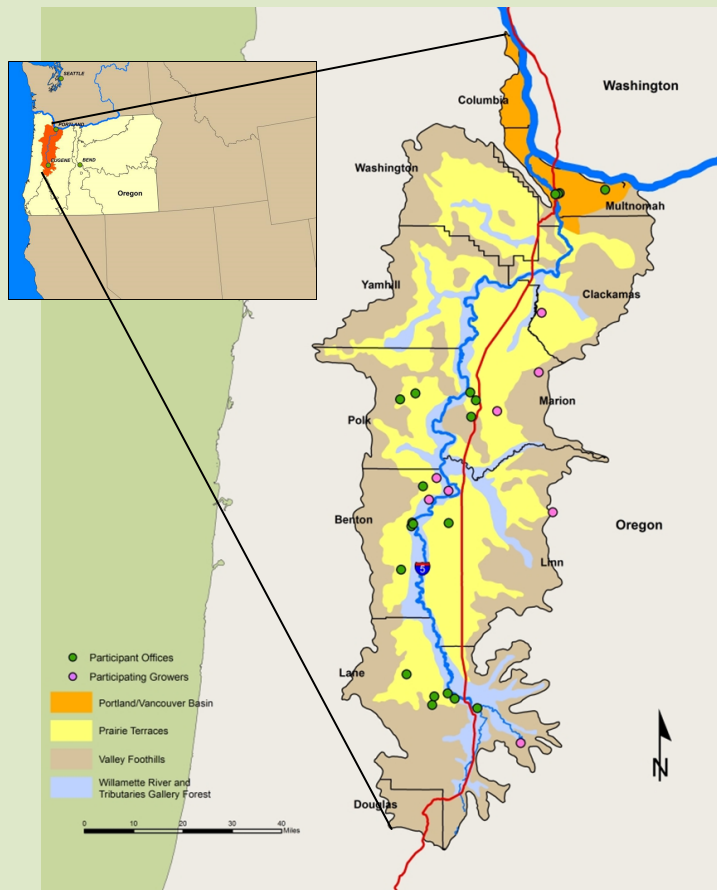




Sourcing Native Plant Materials through the **Willamette Valley Native Plant Materials Partnership**

Jenny Getty, Coordinator
Institute for Applied Ecology

Willamette Valley Native Plant Materials Partnership



Mission – To provide native plant materials to partners to protect and restore the native ecosystems of the Willamette Valley Ecoregion.

Vision – To increase the availability and affordability of genetically diverse and ecologically appropriate native plant materials for use in the Willamette Valley, help stabilize and support the local native seed marketplace, and provide a foundation for successful restoration and healthy, thriving native ecosystems.

Partners

Benton County
BLM – Eugene District
Cascade Pacific Resource
Conservation & Development
City of Corvallis
City of Eugene
Confederated Tribes of Grand
Ronde
Friends of Buford Park & Mt Pisgah
Greenbelt Land Trust
Heritage Seedlings, Inc.
Institute for Applied Ecology
Kenagy Family Farms
Long Tom Watershed Council
Marys River Watershed Council
McKenzie River Trust

NRCS
Oregon Department of Fish & Wildlife
Oregon Department of Transportation
Oregon Metro
Oregon Parks & Recreation
Oregon Watershed Enhancement Board
Oregon Seed Certification Services
Pacific Northwest Natives
Polk Soil & Water Conservation District
The Nature Conservancy
Triangle Farms
Trillium Gardens
US Army Corps of Engineers
US Fish & Wildlife Service
Willamette Habitat Restoration



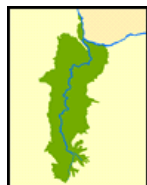
Why a partnership?

- Pool resources to scale production to ecoregion
- Centralize production
- Increase availability of native seed
- Increase genetic diversity of available plant materials
- Lower costs if possible
- Leverage restoration efforts across the valley

Development

- 2012 – Oregon Watershed Enhancement
Board funded a Coordinator for 1 year
- 2013 – Draft MOU
Strategic plan
Website (wvcoop.nativeseednetwork.org)
First seed collection
Adopted fields
First new production
- 2014 – Continued seed collection
New production
Draft plan for transitioning to
self-supporting model
- 2015 – Seed collection
New production
First significant disbursement of seed to partners
Refining model of self-support (through summer 2016)





Willamette Valley Seed Cooperative

Willamette Valley Germplasm

California oatgrass (*Danthonia californica*)

Tested by OSU Seed Laboratory

Pure Seed:	82.46%	Viability:	90%
Weed Seed:	0.12%	Germ or TZ:	TZ
Other Crop:	0.07%	Test Number:	126727
Combined:	0.19%	Date Tested:	8/15/2014
Inert Matter:	17.35%	Bulk Wt.	40 lbs
All States Noxious:	none	PLS Percentage	74.20%

Lot No. B39-8-N16DC01

Provenance: 18 collection sites from Lane, Benton, Linn, Polk, Yamhill, Washington, and Clackamas counties. Elevation range: 305 - 760 feet. G0 seed collected from wet and upland prairie habitats.

Producer: Producer Farm

Generation: G1

Exotic/Noxious Seed (seeds/lb):		Native Seed (seeds/lb):	
Rattail fescue	83/ lb	Oregon sunshine	764/ lb
Soft chess	23/ lb		
Perennial ryegrass	178/ lb		
Hairy chess	22/ lb		

Notes & Unique Characteristics: Grown in 3 breeder blocks and mixed after harvest.

Willamette Valley Native Plant Materials Cooperative, Willamette Valley, OR

Species Selection

- Species native to wet and upland prairie habitats
- Common, matrix species
- Species appropriate for WV-wide seed transfer zone
- Consistent demand
- Easier to grow
- Opportunity to increase genetic appropriateness
- Grower interested/experienced
- What is already on the market?





Vegetation Type	2013	2014	2015	2016	2017
Perennial Matrix Forbs	5	5	3	1	1
Annual Matrix Forbs	2	2	2	2	2
Graminoids	2	2	2	2	2
Nectar/Diversity Forbs	1	1	3	5	5

Species prioritized by type

Scientific Name	Common Name	Priority
List 1. Perennial Matrix Forbs		
<i>Eriophyllum lanatum</i> var. <i>leucophyllum</i>	woolly sunflower	1
<i>Potentilla gracilis</i>	slender cinquefoil	2
<i>Prunella vulgaris</i> var. <i>lanceolata</i>	self-heal	3
<i>Achillea millefolium</i> var. <i>occidentalis</i>	western yarrow	4
<i>Sidalcea campestris</i>	meadow checkermallow	5
<i>Grindelia integrifolia</i>	Puget Sound gumweed	6
<i>Lomatium nudicaule</i>	barestem lomatium	7
<i>Solidago lepida</i> var. <i>salebrosa</i>	western goldenrod	8
<i>Camassia quamash</i> ssp. <i>maxima</i>	common camas	9
<i>Camassia leichtlinii</i> ssp. <i>suksdorfii</i>	tall camas	10
List 2. Annual Matrix Forbs		
<i>Acmispon americanus</i>	Spanish clover	1
<i>Clarkia amoena</i> var. <i>lindleyi</i>	farewell-to-spring	2
<i>Madia elegans</i>	showy tarweed	3
<i>Epilobium densiflorum</i>	dense spike-primrose	4
<i>Plagiobothrys figuratus</i>	fragrant popcornflower	5

Species prioritized by type

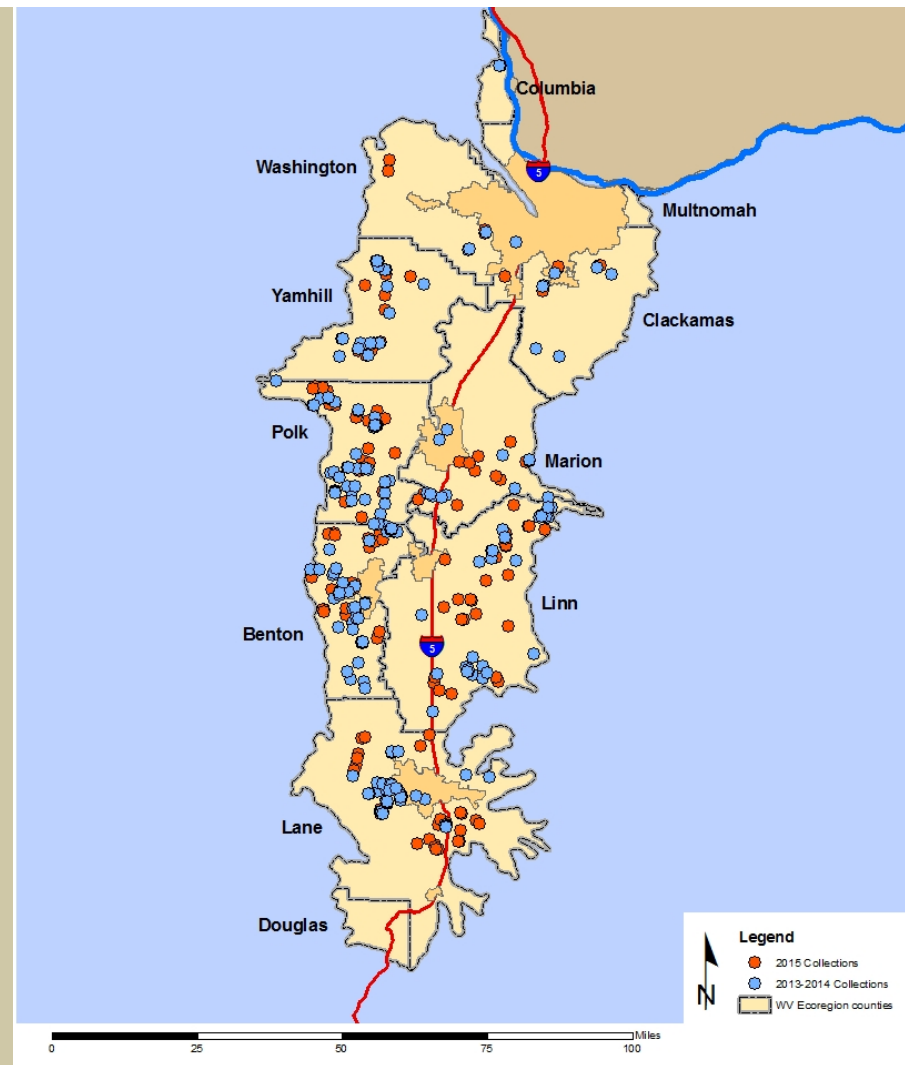
Scientific Name	Common Name	Priority
List 3. Graminoids		
<i>Juncus occidentalis (tenuis)</i>	western rush	1
<i>Elymus trachycaulus</i>	slender wheatgrass	2 or 3
<i>Danthonia californica</i>	California oatgrass	2 or 3
<i>Carex tumulicola</i>	foothill sedge	4
<i>Deschampsia cespitosa</i>	tufted hairgrass	5
<i>Poa secunda (scabrella)</i>	Sandberg bluegrass	6
List 4. Nectar/Diversity Forbs		
<i>Symphyotrichum hallii</i>	Hall's aster	1
<i>Sidalcea malviflora ssp. virgata</i>	rose checkermallow	2
<i>Plectritis congesta</i>	rosy plectritis	3
<i>Allium amplexans</i>	narrowleaf onion	4
<i>Calochortus tolmiei</i>	Tolmie's mariposa lily	5

Valley-wide Collection

- 2-4 person collection crew
- 15+ sites
- 7+/10 counties across the valley
- Sample across each population
- Multiple collections per site
- Remnant populations (not planted)
- Roadsides, conservation lands, private properties
- 10-15 species per year



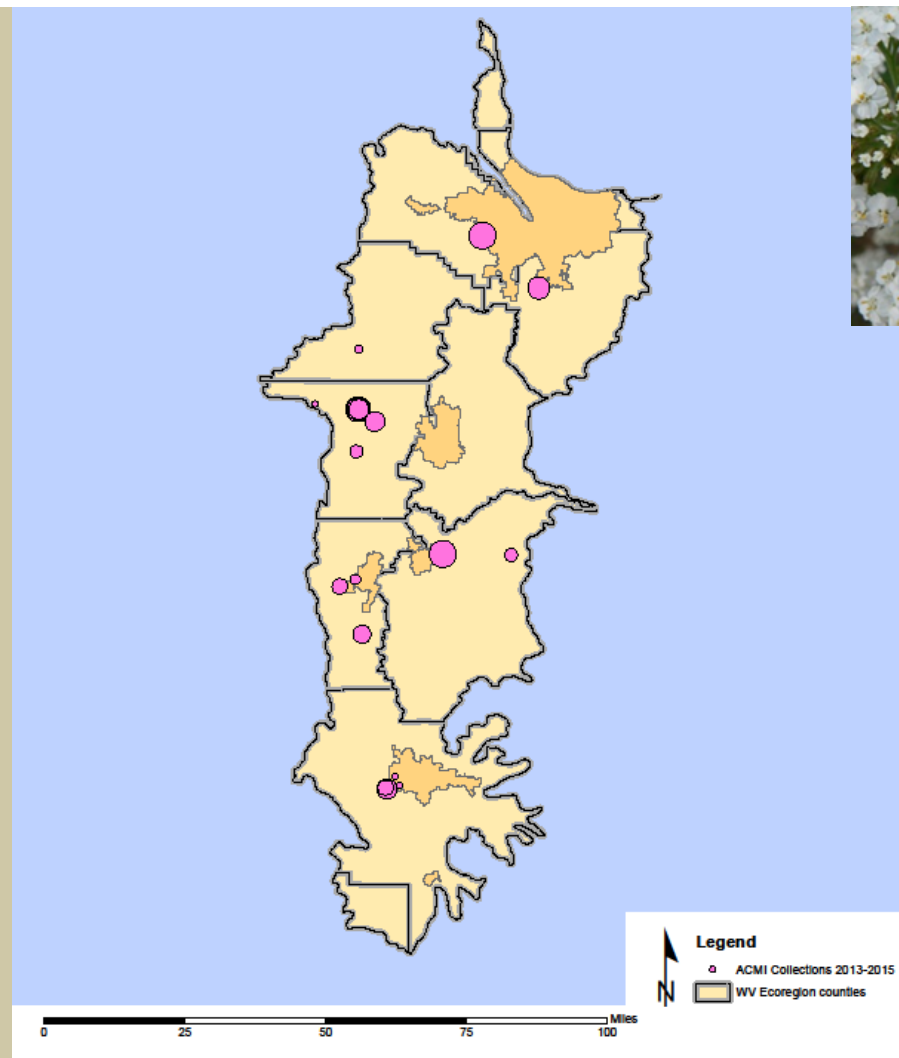
Valley-wide Collection



Epilobium densiflorum



Achillea millefolium var. occidentalis



Lomatium nudicaule



Challenges

- Differing levels of demand among partners
- Genetics issues in some desired species
- Finding collection sites in the east and north valley
- Collection limits (20-25%, though exceptions can be made)
- Multiple collection years needed for some species
- Identifying populations introduced through restoration planting on some sites and roadsides (WEW, refuges, Metro, Heritage, etc.)
- Horticultural/non-native varieties on roadsides (*Achillea millefolium*)
- Difficult production logistics for some species

16 species in cooperative production after 3 years

Scientific Name	Common Name	First full growing season	First Yield
<i>Juncus occidentalis</i>	western rush	Adopted in 2013	2013
<i>Symphyotrichum hallii</i>	Hall's aster	Adopted in 2013	2013
<i>Potentilla gracilis</i>	slender cinquefoil	2014	2015
<i>Solidago lepida</i> var. <i>salebrosa</i>	western (Canada) goldenrod	2014	2015
<i>Acmispon americanus</i>	Spanish clover	2015	2015*
<i>Carex tumulicola</i>	foothill sedge	2015	2016-2017
<i>Prunella vulgaris</i> var. <i>lanceolata</i>	self-heal	2015	2016*
<i>Achillea millefolium</i> var. <i>occidentalis</i>	western yarrow	2016	2017*
<i>Camassia leichtlinii</i> var. <i>suksdorfii</i>	tall camas	2016	2019
<i>Camassia quamash</i> var. <i>maxima</i>	common camas	2016	2019
<i>Epilobium densiflorum</i>	dense spikeroose	2016	2016*
<i>Lomatium nudicaule</i>	barestem lomatium	2016	2017
<i>Madia elegans</i>	showy tarweed	2016	2016
<i>Plectritis congesta</i>	rosy seablush	2016	2016*
<i>Sidalcea campestris</i>	meadow checkermallow	2016	2017
<i>Sidalcea malviflora</i> ssp. <i>virgata</i>	rose checkermallow	2016	2017
<i>Calochortus tolmiei</i>	Tolmie's mariposa lily	Adopt?	2016?
<i>Clarkia amoena</i> var. <i>lindleyi</i> ?	farewell-to-spring	2016?	2016?
<i>Danthonia californica</i> ?	California oatgrass	2017?	2018?
<i>Ranunculus occidentalis</i>	western buttercup	2017	2018

Production

- **Seed increase for some species**
- **Contract production**
- **Not intended for public sale**
- **Fields are sized to cover partner needs**



Grower selection process



- In 2013 + 2014, growers were chosen based on grower availability, niche, interest, and field size
- Preference given to member growers
- With multiple large fields beginning in 2015, we are opening up the selection process to become more competitive where more than one grower is interested

Year 4: Where are we now?



- Continuing collection efforts
- Finalizing the next set of priority species
- 16 fields in production, some in seed increase
- Working on transition from support through partner contributions to self-sustainability through seed sales

Transition Strategy



1. Contributing partners will be “paid back” in produced seed.
2. A percentage of each annual harvest will be made available for purchase by non-contributing partners. The remaining percentage will be distributed among contributing partners based on their relative contribution.
3. When seed remains unsold, contributing partners get first right of refusal to purchase remaining seed. Unsold seed also may be stored. Similarly, small seed lots may be stored until an adequate quantity exists for distribution.
4. Seed costs will be based on full program costs including cost of grow out, seed collection, seed “refresh”, and program management.
5. Establishment costs prior to significant production will be amortized over several years.

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Thank you!