



Sierra Meadows Partnership Project Tracking Results 2021

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Purpose

- Need for a single unified approach for tracking progress to-date
- Want to track progress towards meeting the goal of protecting and/or conserving 30,000 meadow acres by 2030
- Data can help inform our strategy and enhance communication with agencies, funders, etc.

History

- Tracking began in 2020, and includes some projects completed prior to 2020.
- Data presented includes cumulative totals for 2020-2021 except where indicated.

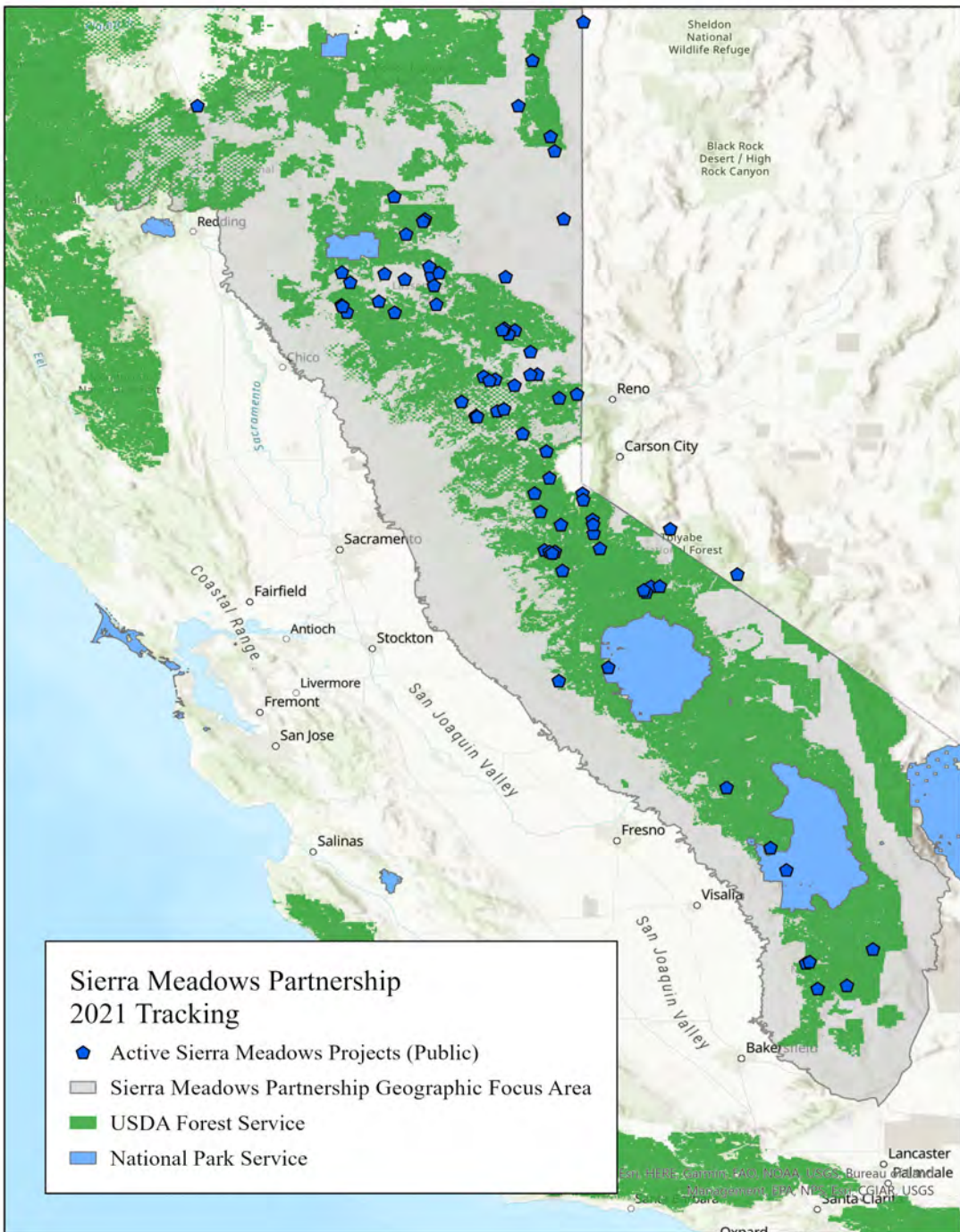


Data Collected

- Project and Meadow Name(s)
- Project Location and Landowner
- Project Start/End Dates
- Project Type, Phase, and Status
- Primary Contact and Project Partners
- Project Description
- Restoration Objectives, Actions, and Target Species
- WRAMP Monitoring Information
- Funding Status, Sources, Estimated Project Costs, Funding Needed

Summary

- Received data on projects from 25 organizations/agencies
- 89 total projects representing 16,475 acres
- 70 projects/9,603 acres of restoration, 4,961 acres of acquisition and conservation easement, and 1,910 acres of monitoring/research only
- Plumas Corporation (21.3%) and American Rivers (16.8%) are working on projects over the most meadows
- North Fork Feather River (13.2%) and Upper Yuba (8.2%) watersheds had most projects

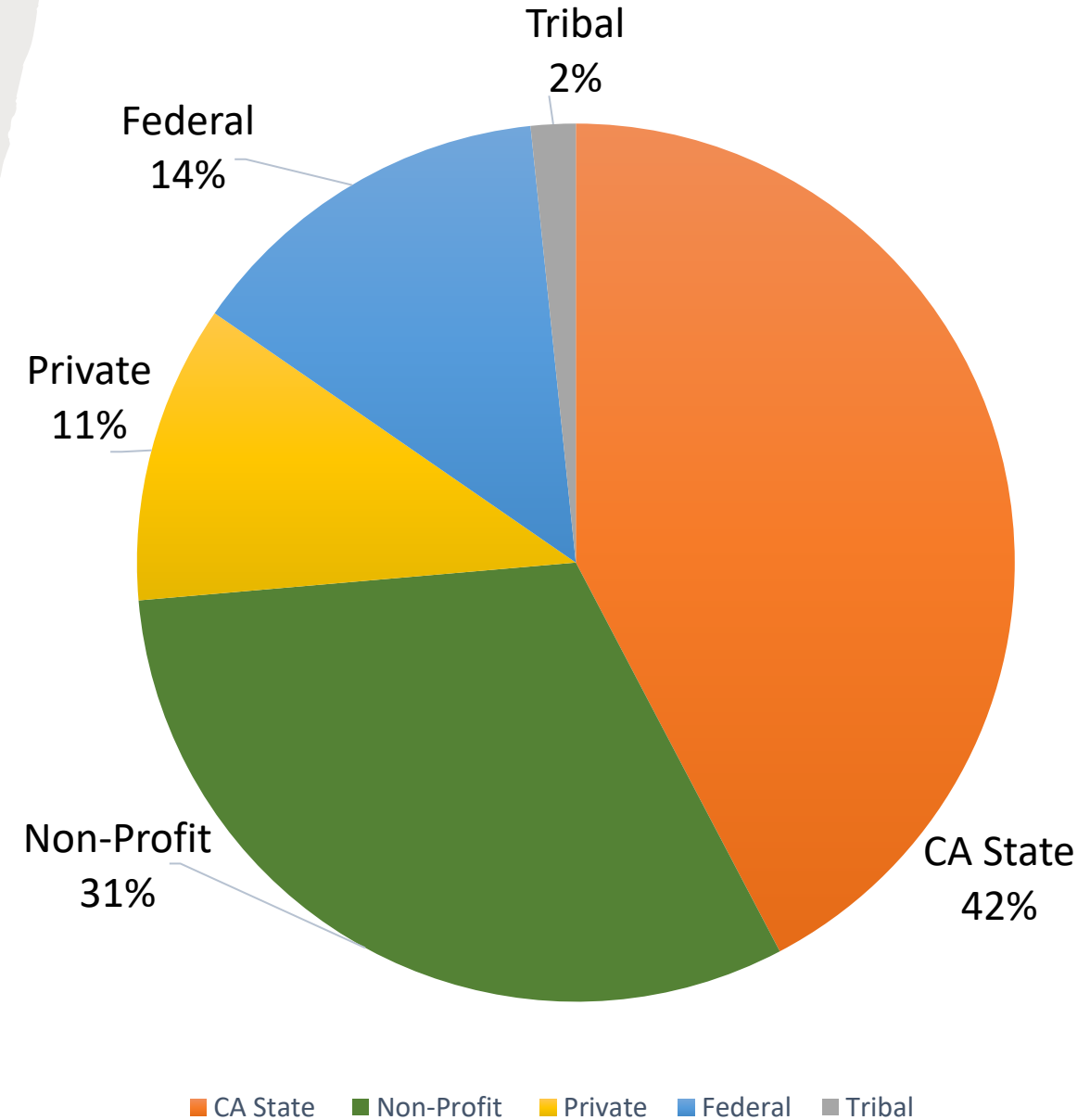


Funding

Funding Totals from 2020-2021 Tracking

- Total estimated project costs are ~\$74 million.
- Top funders are WCB (17.5%), CDFW (12.6%), and NFWF (14.2%)

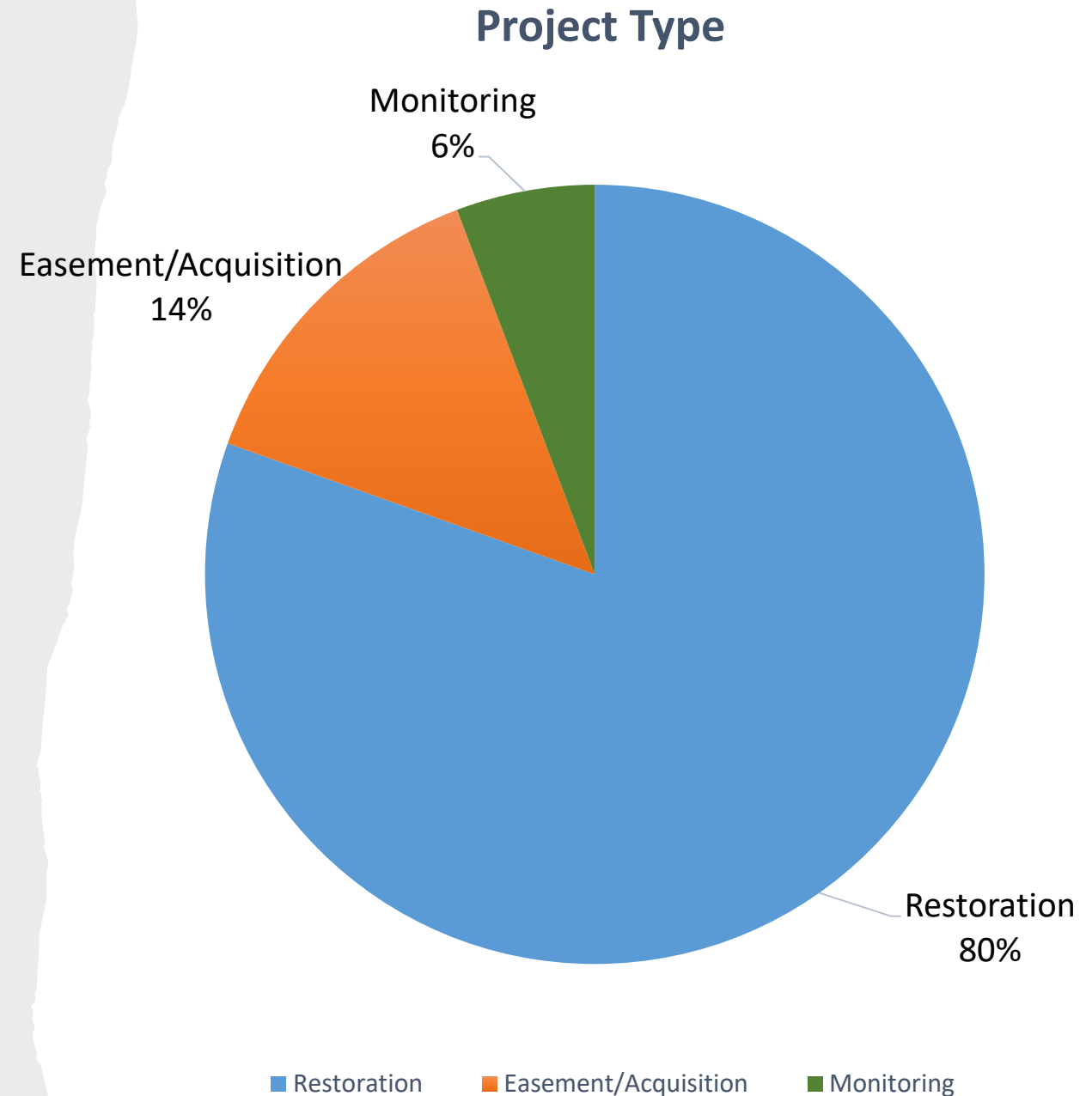
Percent of Projects by Funder Type



Project Types and Phases

Project Reporting from 2020-2021 Tracking

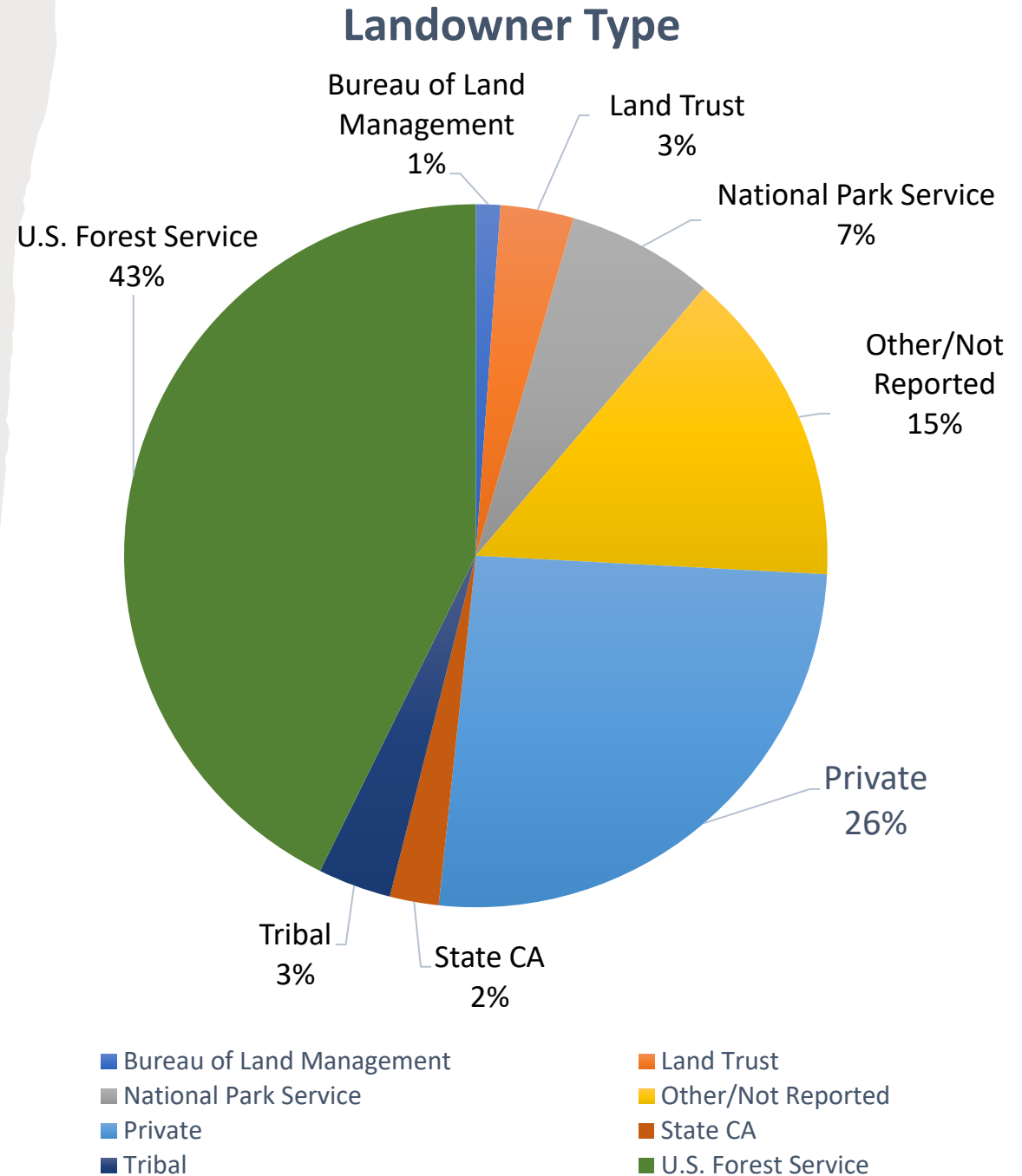
- Majority of projects (80%) are meadow restoration.
- Of the meadow restoration projects, 34% are in the design/planning phase, 30% have completed implementation, and 24% are in the process of implementation, 10% did not report phases



Project Landownership

Landownership Reporting from 2020-2021 Tracking

- Majority (43%) of all projects are on USFS lands, followed by private (26%)
- 50% of restoration projects are entirely or partially on USFS lands





Target Species and Taxa: Restoration Projects

- 33 (47.1%) of restoration projects reported target species/taxa
- Of these projects, most common target species were willow flycatcher, Greater Sandhill Crane, Sierra Nevada yellow-legged frog, and trout species (Eagle Lake rainbow trout, Kern River rainbow trout)
- Of these projects, birds were the most frequent target species, followed by amphibians and fish



Restoration Actions

- 52 (74.2%) of restoration projects reported restoration actions
- Most common restoration actions:
 - Fill or Partial Channel Fill
 - Infrastructure Improvements/Modifications
 - Riffles
 - Revegetation
- Majority reported more than one action

Takeaways

- Need to diversify funding sources for meadow restoration – very reliant on state funding
- Private land is second largest landownership type for projects
- Few projects occur on NPS land (as reported)
- Seek out opportunities to partner with NPS and land trusts on projects



Appendix A: Respondents

Alpine Watershed Group
Amador Resource Conservation District
American Rivers
California Department of Water Resources
California Tahoe Conservancy
California Trout
Feather River Land Trust
Forest Creek Restoration
National Park Service
Nevada Irrigation District
Pacific Forest Trust
Pit RCD
Plumas Corporation
Point Blue Conservation Science
South Yuba River Citizens League
Stormwater Program Coordinator
Swift Water Design
SYRCL
Tahoe National Forest
Tehama RCD
The Sierra Fund
The Trust for Public Land
Truckee River Watershed Council
Tuolumne River Trust
U.S. Fish and Wildlife Service

Appendix B: Target Species and Taxa, Restoration Projects

Species	Count
Willow Flycatcher	15
Greater sandhill crane	9
Bald Eagle	9
Sierra Nevada Yellow-legged frog	7
Golden Eagle	6
Ferruginous Hawk	6
Prairie Falcon	5
Yellow Warbler	5
Swainson's Hawk	5
Eagle Lake Rainbow Trout	4
Kern River rainbow trout	3
Yosemite toad	3
Great gray owl	2
Sierra Nevada Mountain Beaver	2
Lahontan cutthroat trout	2
Northern Goshawk	2
Chinook Salmon	1
Modoc sucker	1

Taxa	Count of Projects
Birds	23
Fish	12
Amphibians	15
Plants	4

Appendix C: Restoration Actions

Restoration Action	# of times reported as Restoration Action	% of actions reported (N=140)	% of restoration projects reporting actions (N=52)
Fill or Partial Channel Fill	30	21%	57%
Infrastructure Improvements/Modifications	14	10%	26%
Riffles	13	9%	25%
Revegetation	11	7%	21%
Grazing Management	11	7%	21%
Beaver Dam Analogs (BDA)	11	7%	21%
Grade Control	9	6%	17%
Fencing	9	6%	17%
Debris Jam	8	5%	15%
Conifer Removal	6	4%	11%
Headcut Treatment	4	3%	7%
Post-Assisted Log Structures (PALS)	3	2%	5%
Willow Staking	3	2%	5%
Wood Structures	2	1%	3%
Culverts	2	1%	3%
Invasive Species Removal	2	1%	3%
Pond and Plug	1	<1%	1%
Prescribed Burning	1	<1%	1%

Appendix D: Restoration Projects Summary

Project Type	Project Phase	Project Phase Status	# Projects	# Meadows	Number of Acres
Restoration*	-	-	7	7	-
Restoration	Implementation	Complete	21	38	1114
Restoration	Implementation	In Progress	17	20	5407
Restoration	Design/Planning	In Progress	24	29	2889
Restoration	Pre-Restoration Monitoring	In Progress	1	1	193
Totals			70	95	9603

*7 projects did not report phase or acreage

Appendix E: Summary of Restoration Projects Completed by Year

Year	# of Projects	# of Meadows	Total Acres
pre-2020	6	9	352
2020	8	20	236
2021	7	9	397