

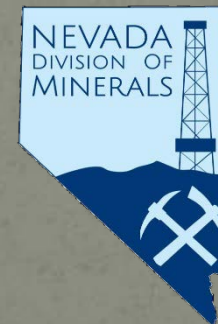
2016 Update

# Nevada Land Withdrawals from Mineral Entry A Historical Perspective



University of Nevada, Reno

Modified from original study in 2011 by:  
S. Bassett, I. Morrison, and K. Berry  
Department of Geography  
Mackay School of Earth Sciences and Engineering,  
College of Science  
University of Nevada, Reno



Updated in October, 2016 by:  
Dennis Bryan  
Nevada Commission on Mineral Resources  
&  
Garrett A. Wake  
Nevada Division of Minerals

## **Disclaimer:**

The Nevada Division of Minerals (NDOM hereafter) assumes no responsibility for errors or omissions. No warranty is made by NDOM as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data; nor shall the act of distribution to contractors, partners, or beyond, constitute any such warranty for individual or aggregate data use with other data. In no event shall NDOM have any liability whatsoever for payment of any consequential, incidental, indirect, special, or tort damages of any kind, including, but not limited to, any loss of profits arising out of the use or reliance on this data.

***“Unbelievable as it may seem, an area larger than that encompassing 25 of the 27 states east of the Mississippi River is no longer accessible even for mineral exploration, not to mention development for mining”***

**J. Allen Overton. Jr.  
President  
American Mining Congress**

**1975**

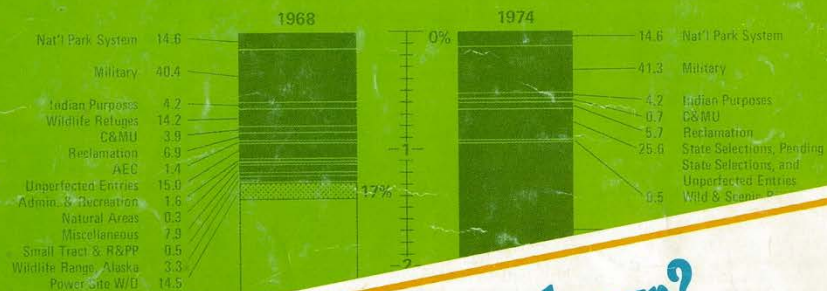


# MINING

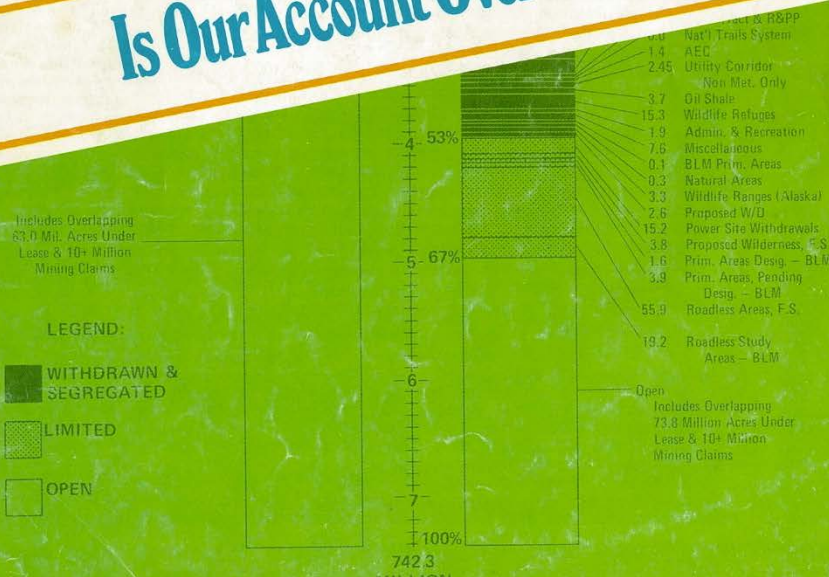
## CONGRESS JOURNAL

PUBLISHED BY THE AMERICAN MINING CONGRESS

### PUBLIC LANDS EXCLUDED FROM MINERAL EXPLORATION AND DEVELOPMENT UNDER THE MINING LAW



**Is Our Account Overdrawn?**



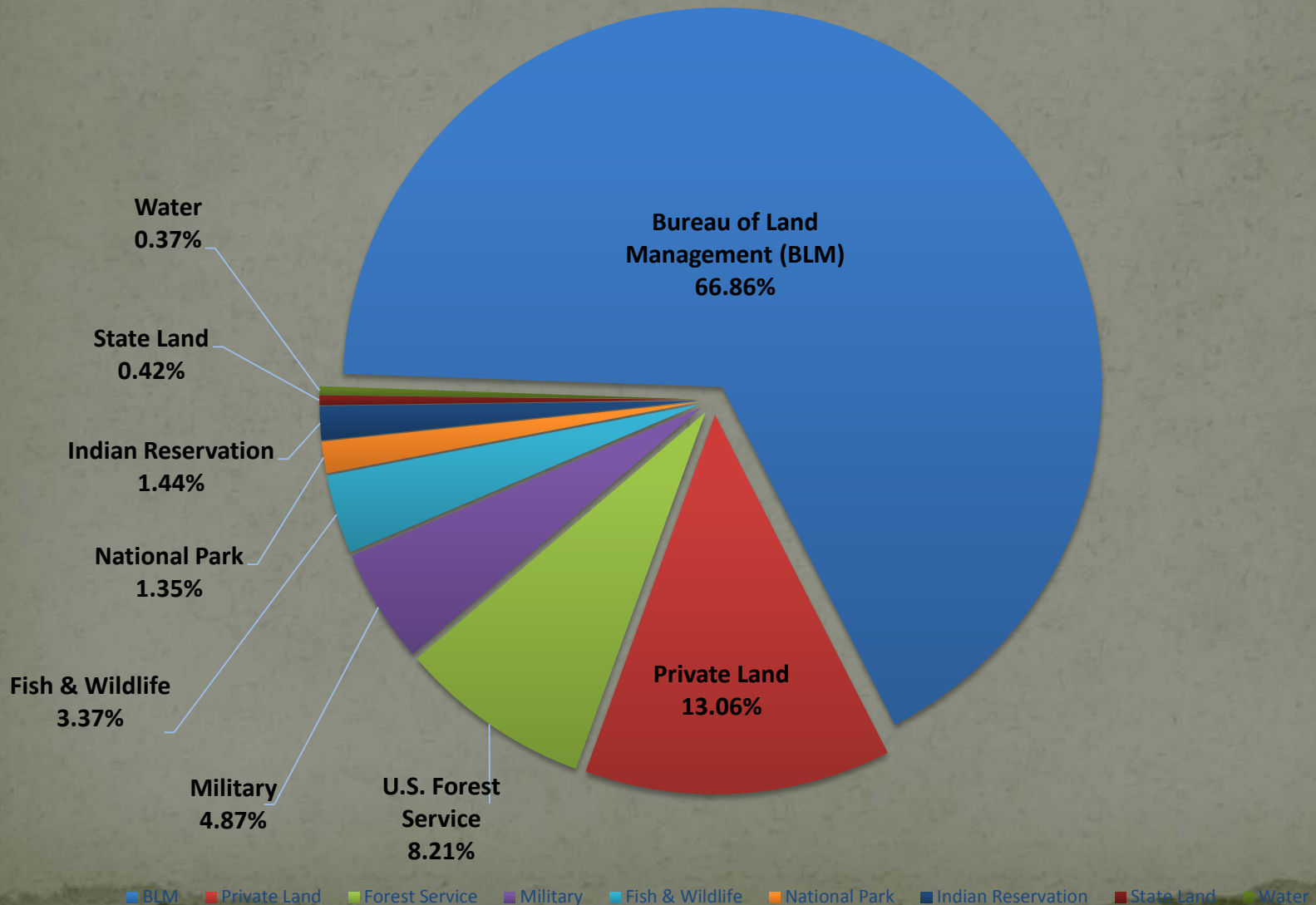


# NEVADA

## Statistics

- Became Territory of the United States in 1848 as part of the Treaty with Mexico following the Mexican-American War
- Part of Utah Territory originally then became Nevada Territory in 1860
- Established as the 36<sup>th</sup> state of the Union October 31, 1864 – Population @ 50,000
- Total Area: 70,264,320 acres, 7<sup>th</sup> largest state

# Who Manages/Owns Nevada Lands?

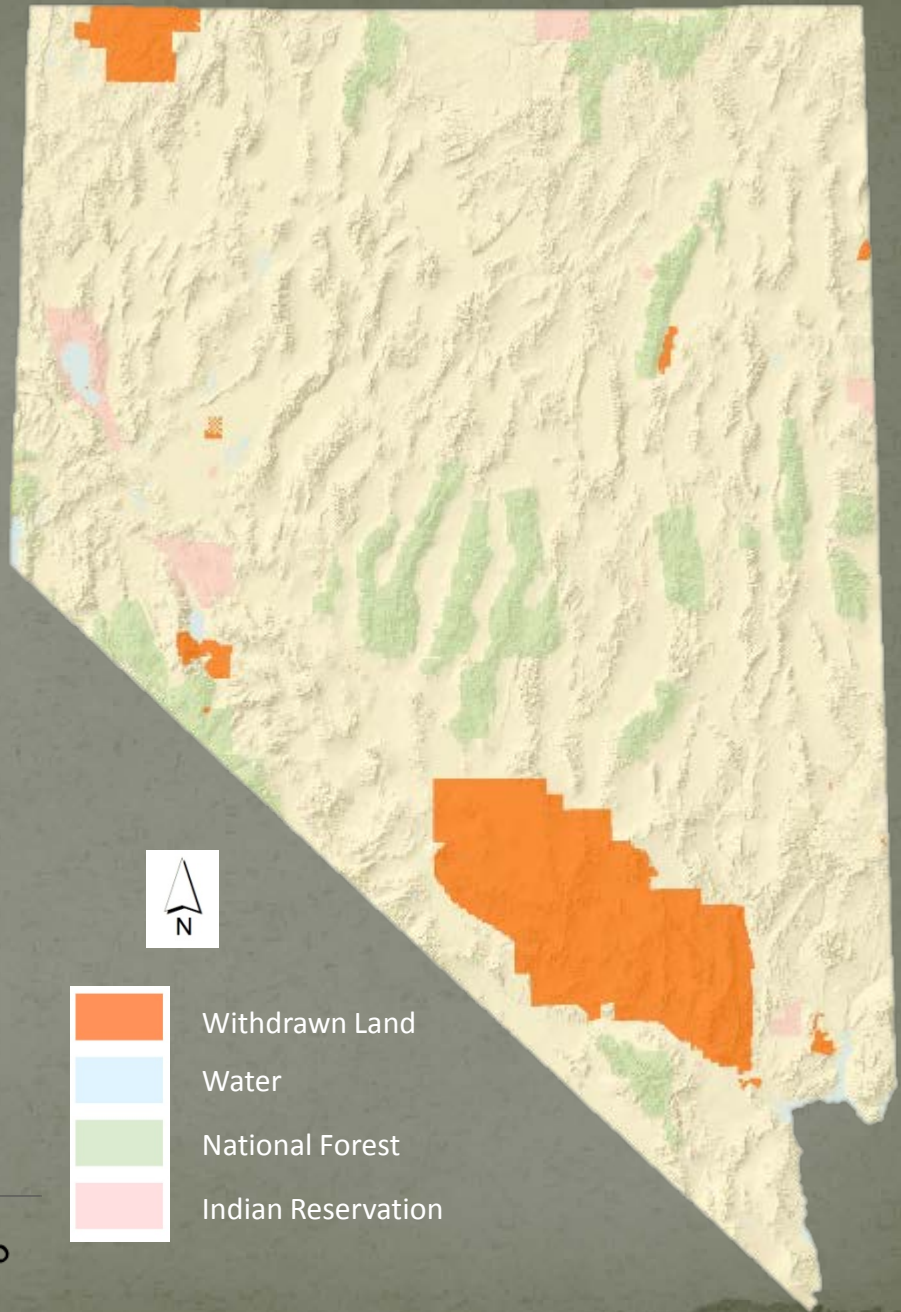
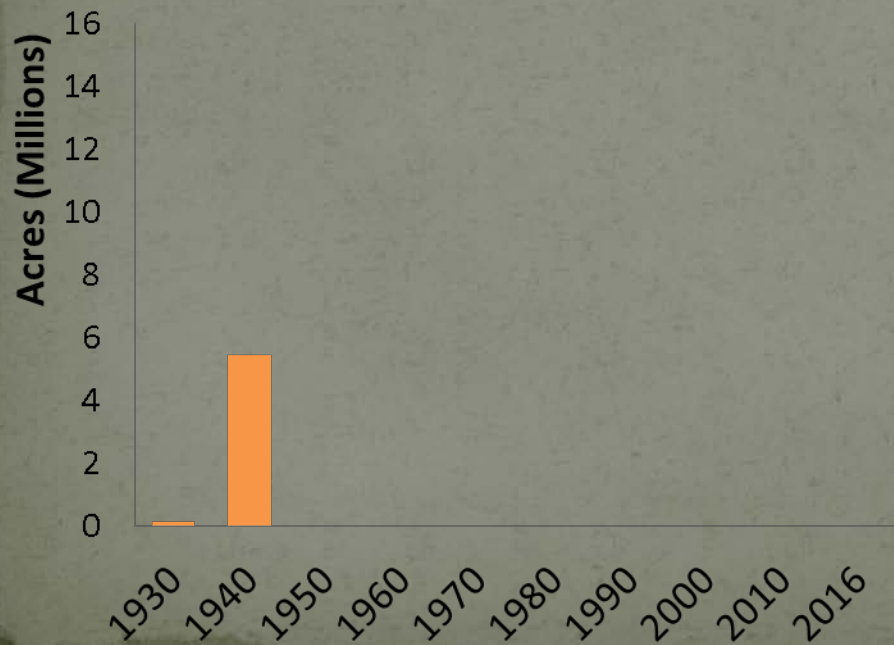


# Nevada Land Withdrawals up to 1930

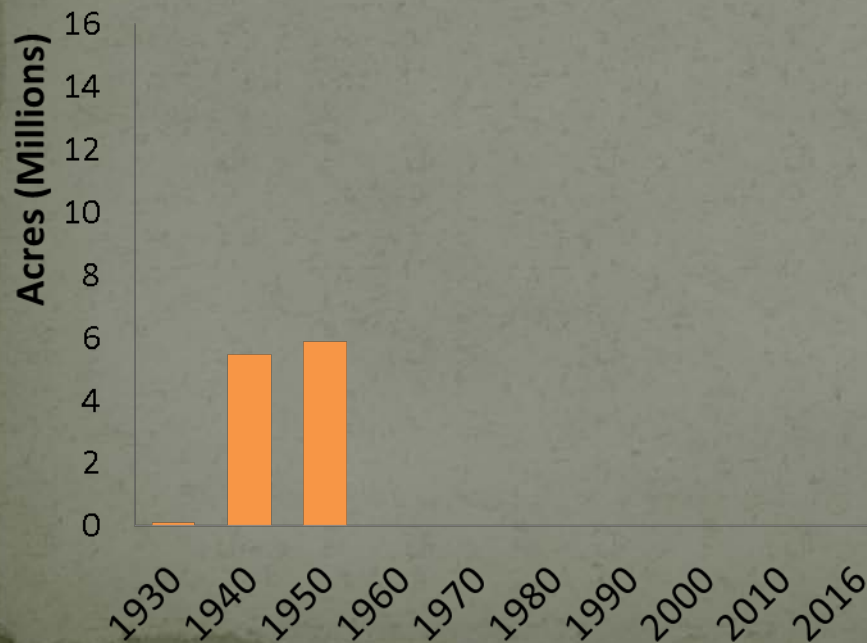




# Nevada Land Withdrawals up to 1940

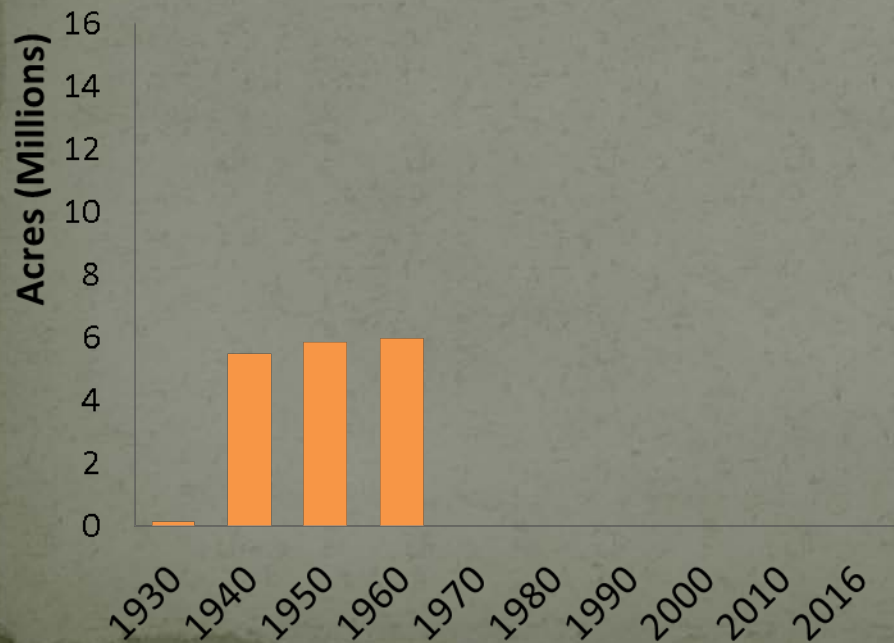


# Nevada Land Withdrawals up to 1950



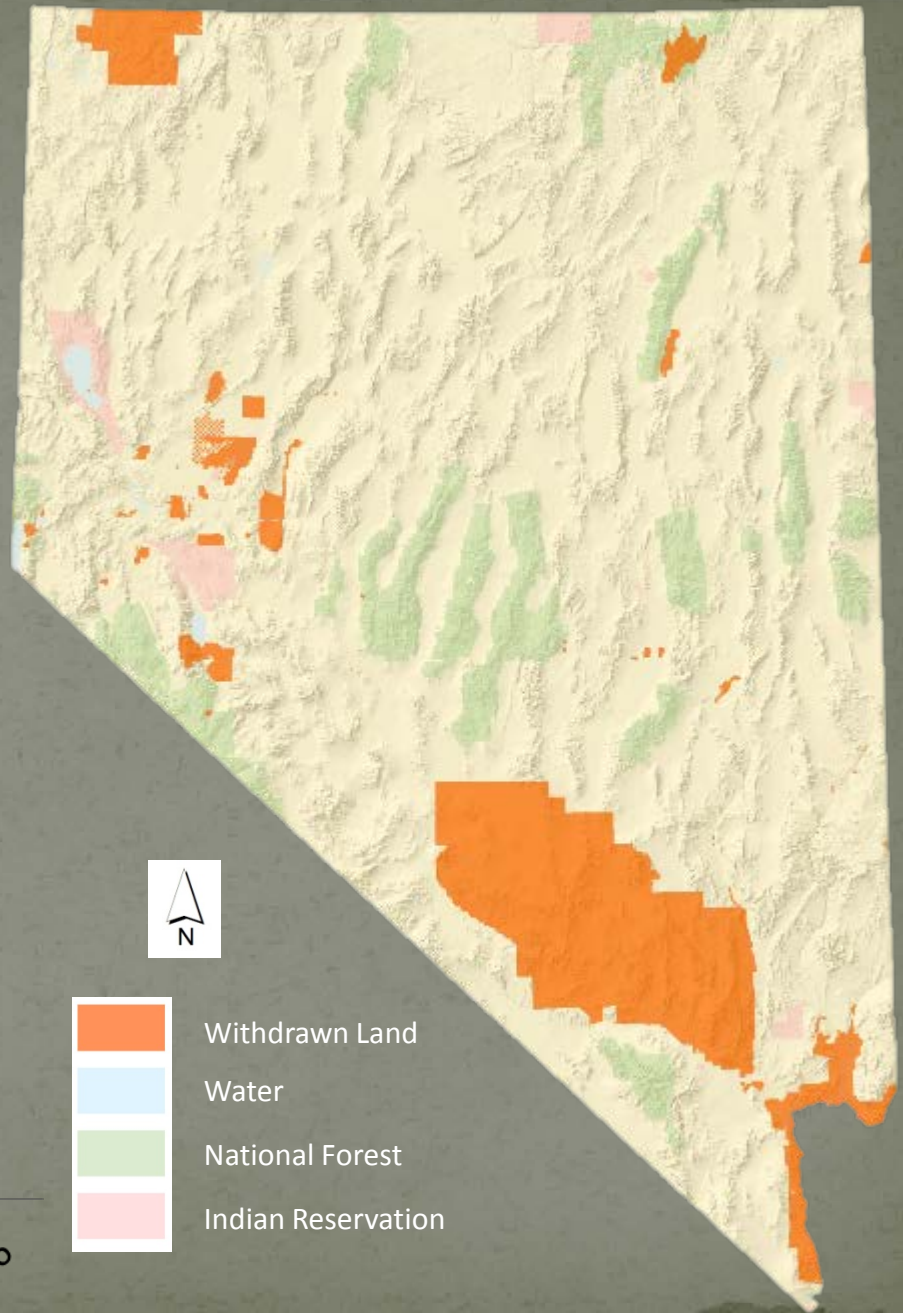
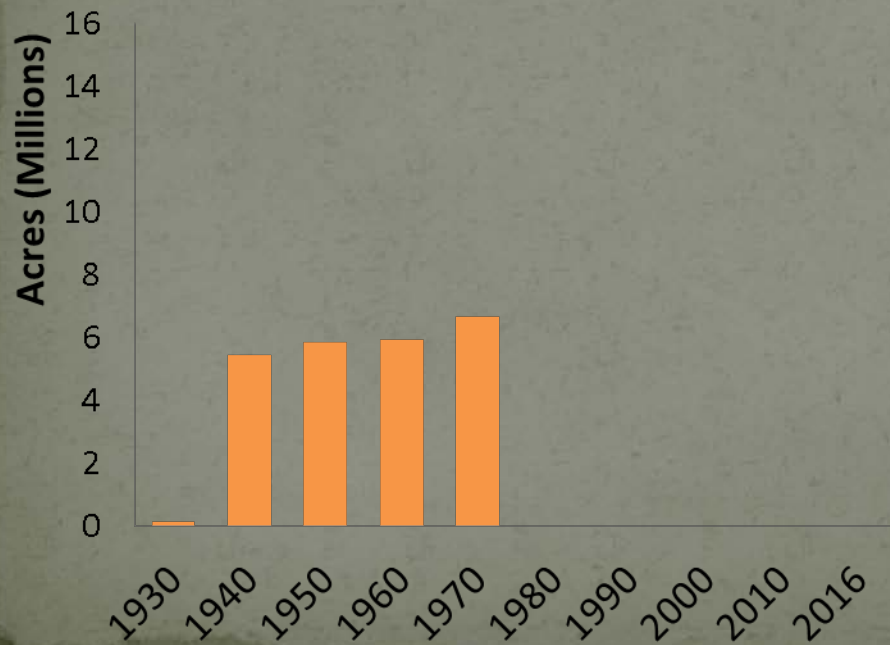


# Nevada Land Withdrawals up to 1960

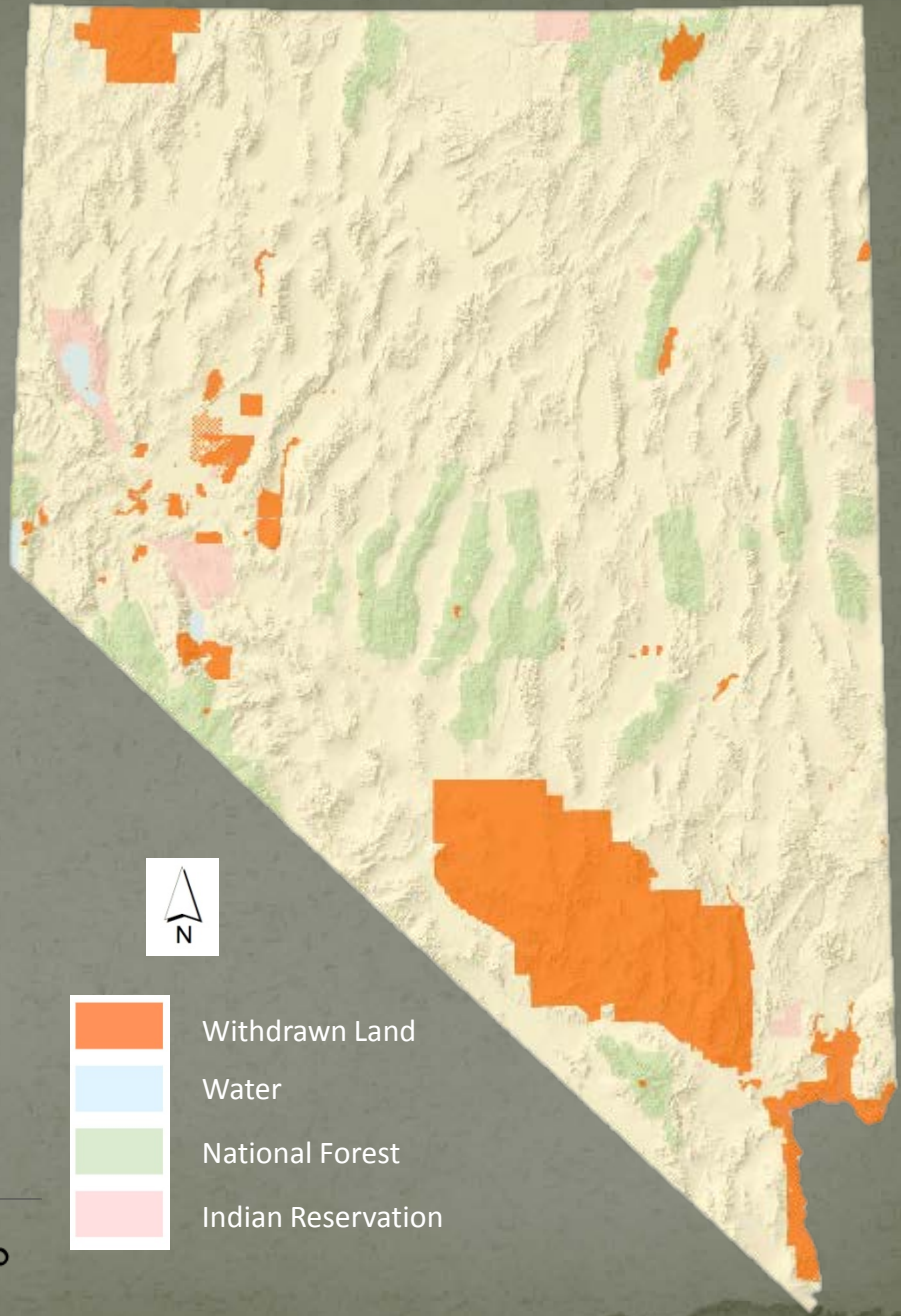
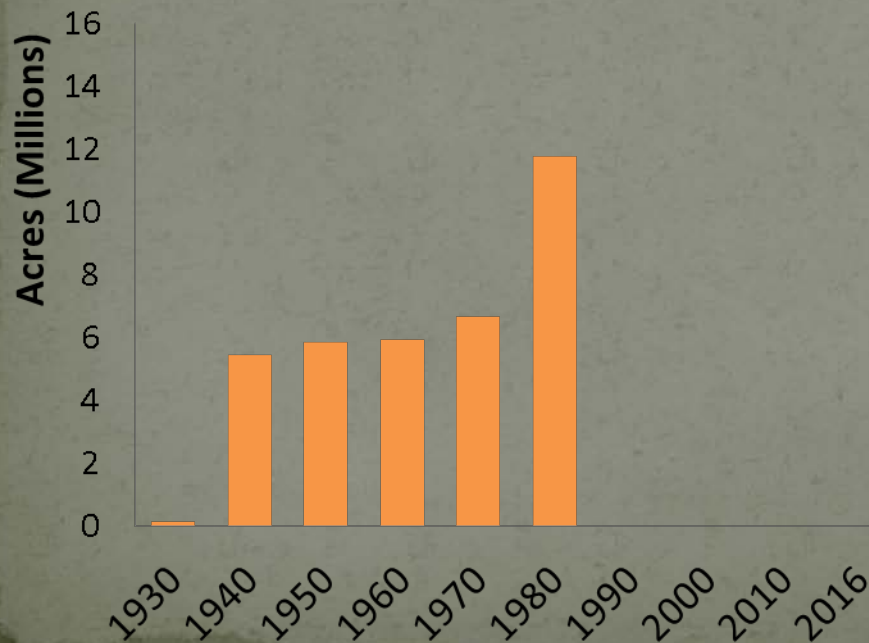




# Nevada Land Withdrawals up to 1970

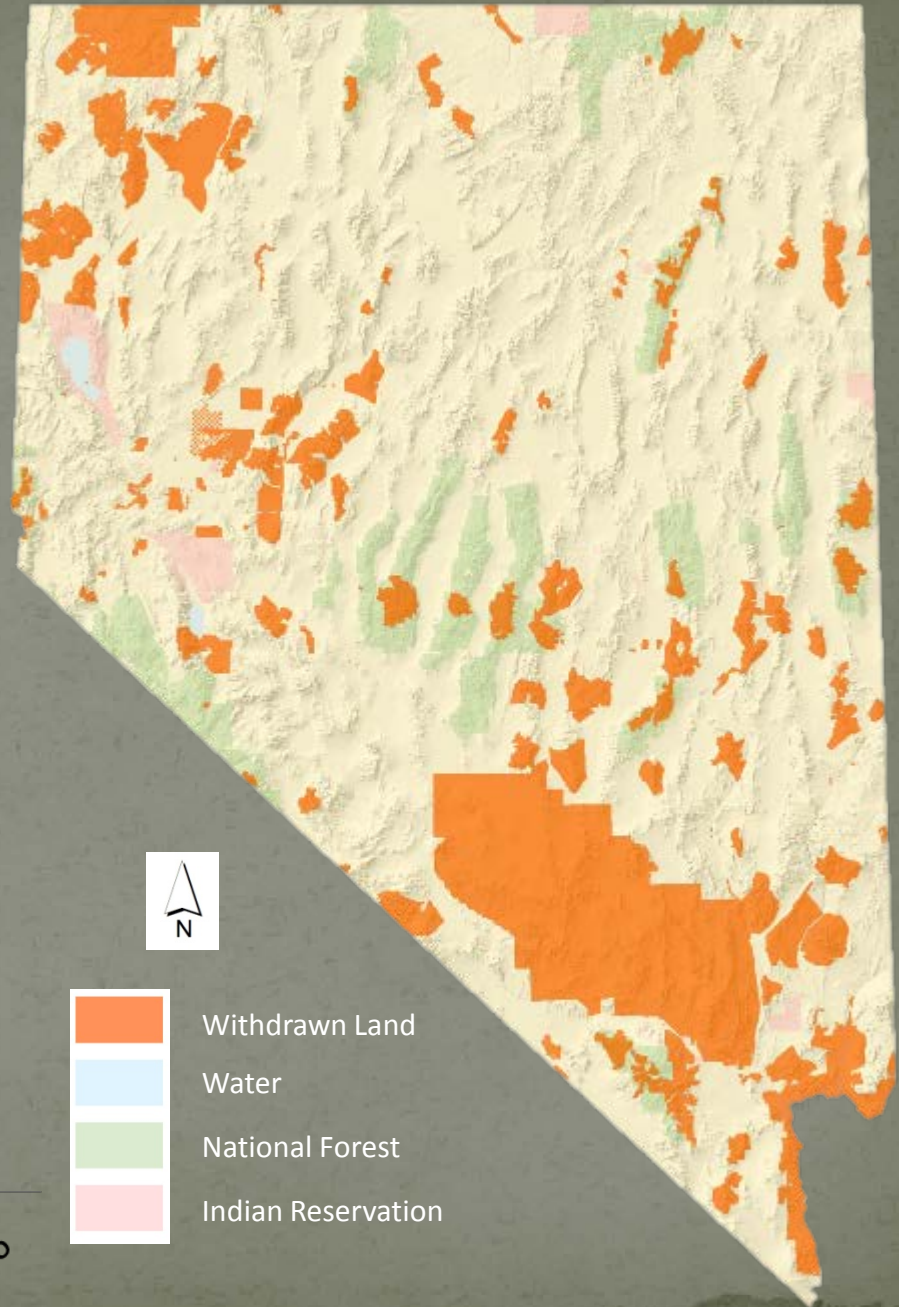
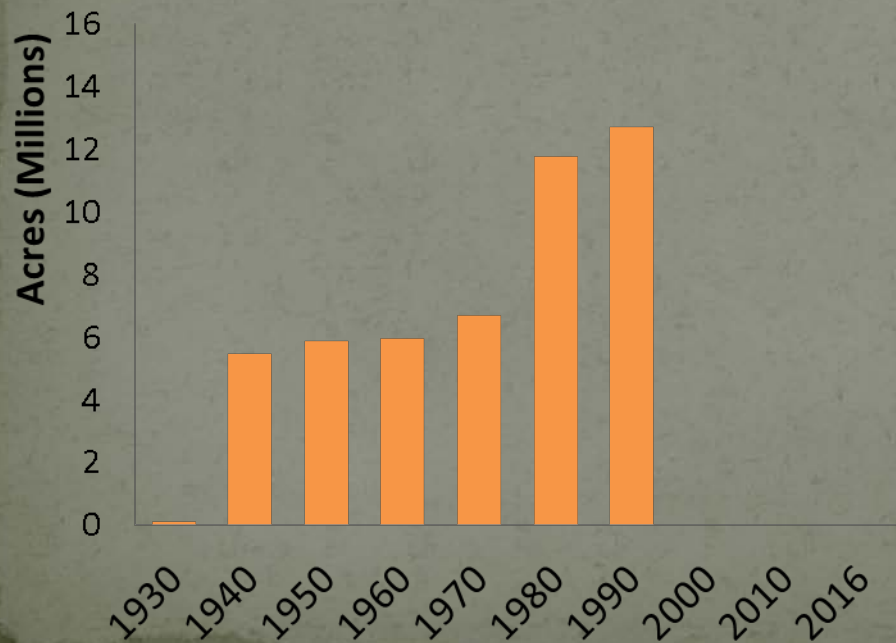


# Nevada Land Withdrawals up to 1980



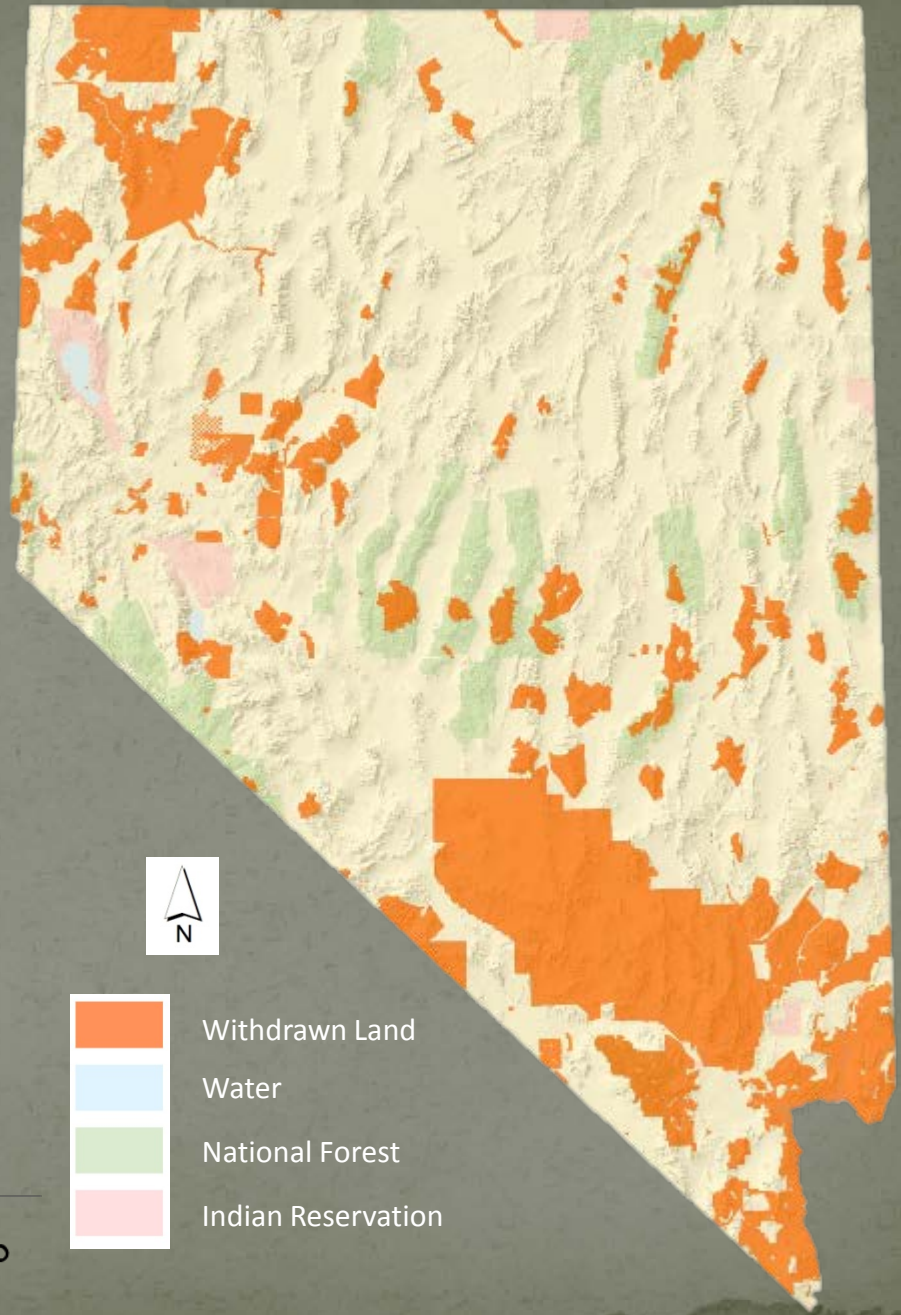
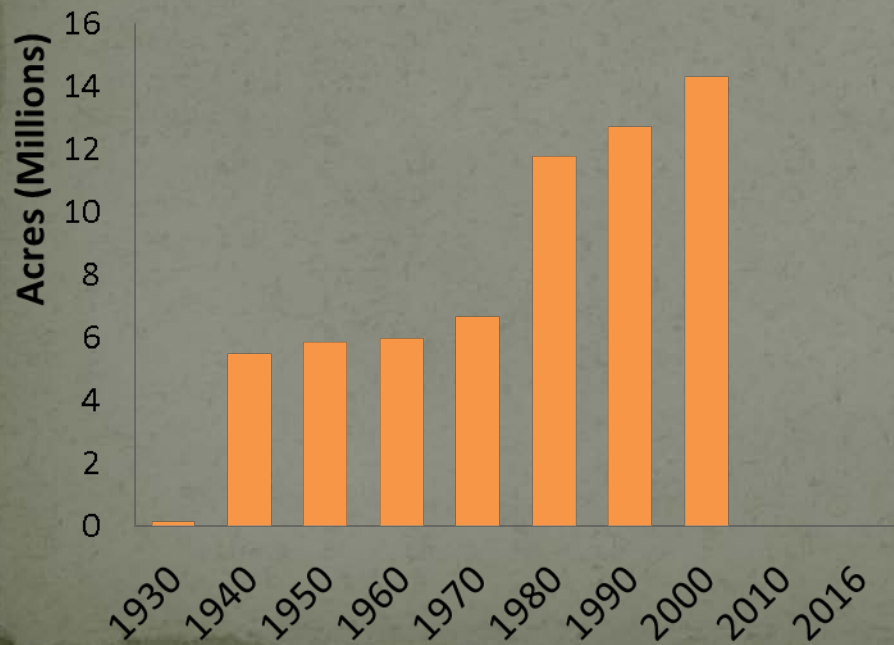


# Nevada Land Withdrawals up to 1990

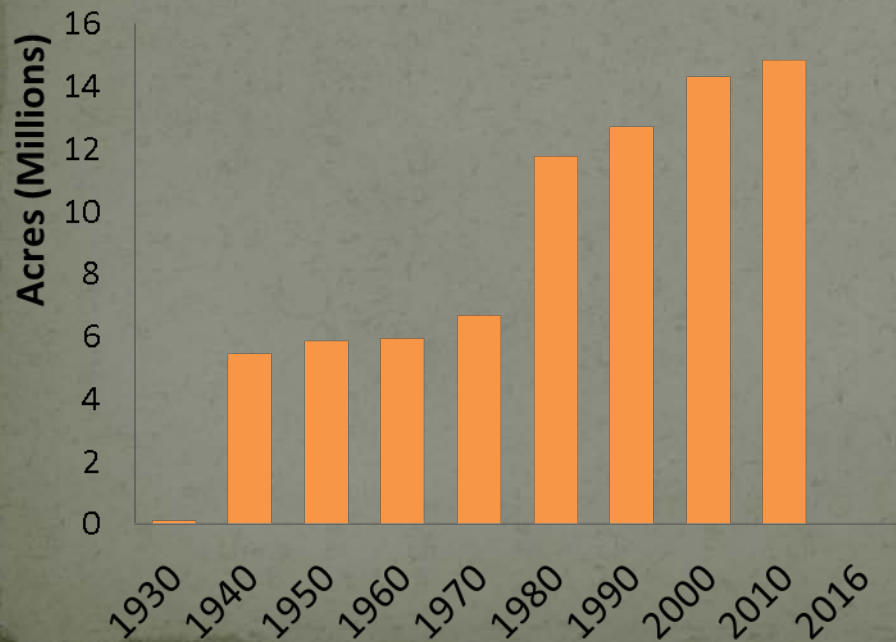




# Nevada Land Withdrawals up to 2000



# Nevada Land Withdrawals up to 2010



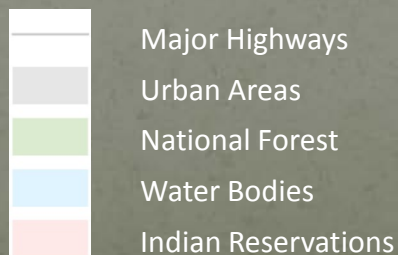


# Nevada Land Withdrawal Status up to 2010

## Withdrawn Lands



## Non-Withdrawn Lands





# Total Land Area Withdrawals to 2010

As a percentage of the entire state:

Year	Acres	Percent of Nevada
1930	132,247	0.19%
1940	5,460,598	7.72%
1950	5,861,114	8.28%
1960	5,951,860	8.41%
1970	6,672,218	9.43%
1980	6,740,812	9.53%
1990	12,701,336	17.95%
2000	14,299,822	20.21%
2010	14,848,842	20.99%

← Wilderness

# Withdrawals: 2010 through September 2016

- National Monuments:
  - Tule Springs Fossil Beds (2014): 22,650 acres
  - Basin and Range (2015): 704,000 acres
    - \*~15,075 acres already within ACEC area (Mt. Irish ACEC)
    - \*~30,623 acres already within Wilderness (Worthington Mountains Wilderness)
- BLM & USFS Wilderness Areas:
  - Pine Forest Range Wilderness (BLM; 2014): 26,000 acres
    - \*~25,650 acres released from WSA
  - Wovoka Wilderness (USFS; 2014): 48,981 acres
- ACECs
  - Ivanpah (Silver State South ROD; 2014): 31,857 acres

Total Additional Withdrawn Land: 762,140 acres

% of Nevada: 1.08%



# Nevada Land Withdrawal Status (Oct 2016)




## Legend

-  Wilderness Areas
-  Wilderness Areas
-  Wildernes Study
-  Areas of Critical Environmental Concern
-  National Conservation Areas/Monuments
-  USFS Special Interest Management Areas
-  NDOW Wildlife Management Areas

### Withdrawn Lands

-  Regional Park
-  Nevada State
-  National Park Service
-  Fish and Wildlife Service
-  Department of Energy
-  Department of Defense

### Non-withdrawn Lands

-  Bureau of Indian
-  Forest Service
-  Water

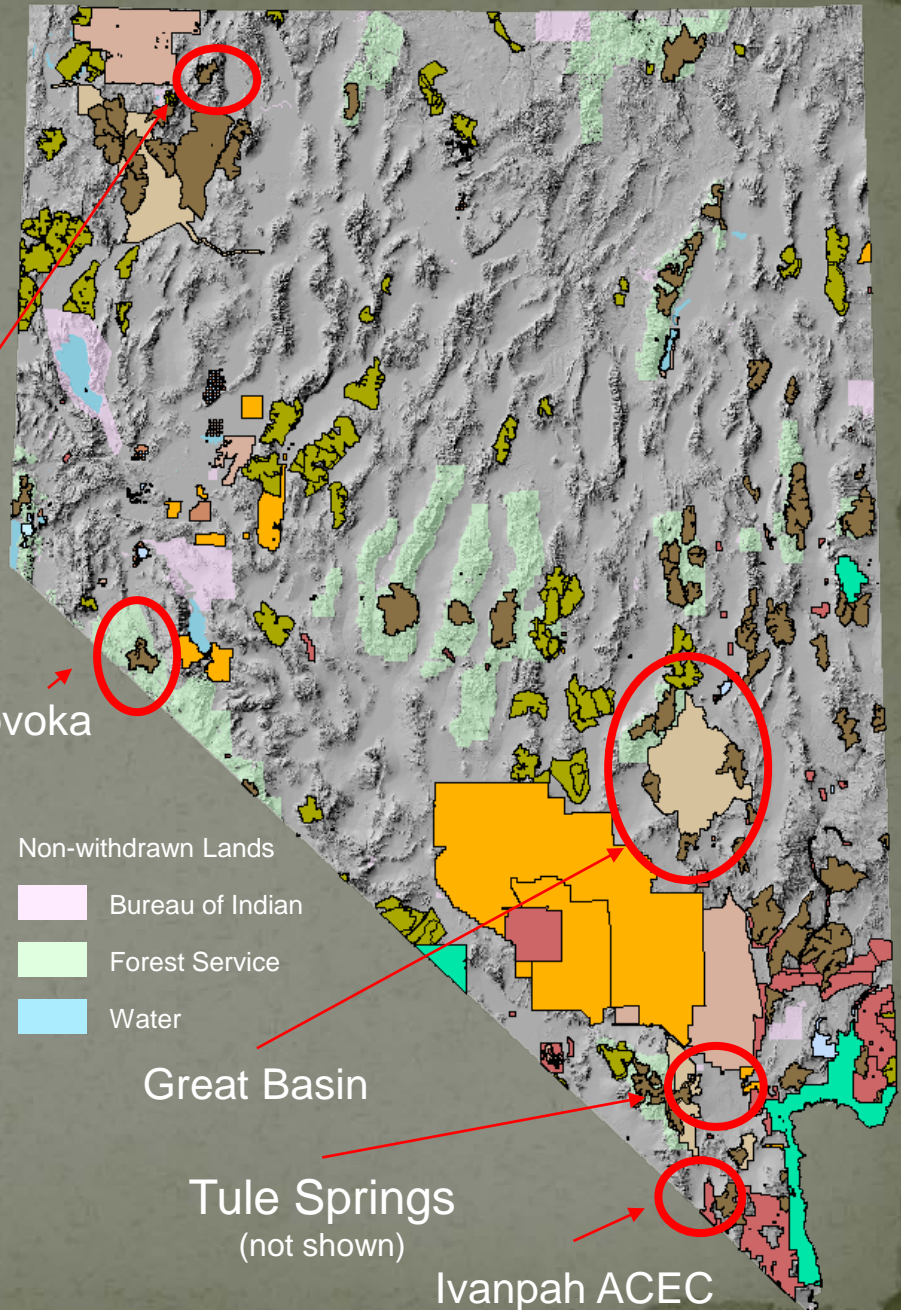
Pine Forest

Wovoka

Great Basin

Tule Springs  
(not shown)

Ivanpah ACEC



# Withdrawals: 2010 through Present (cont.)

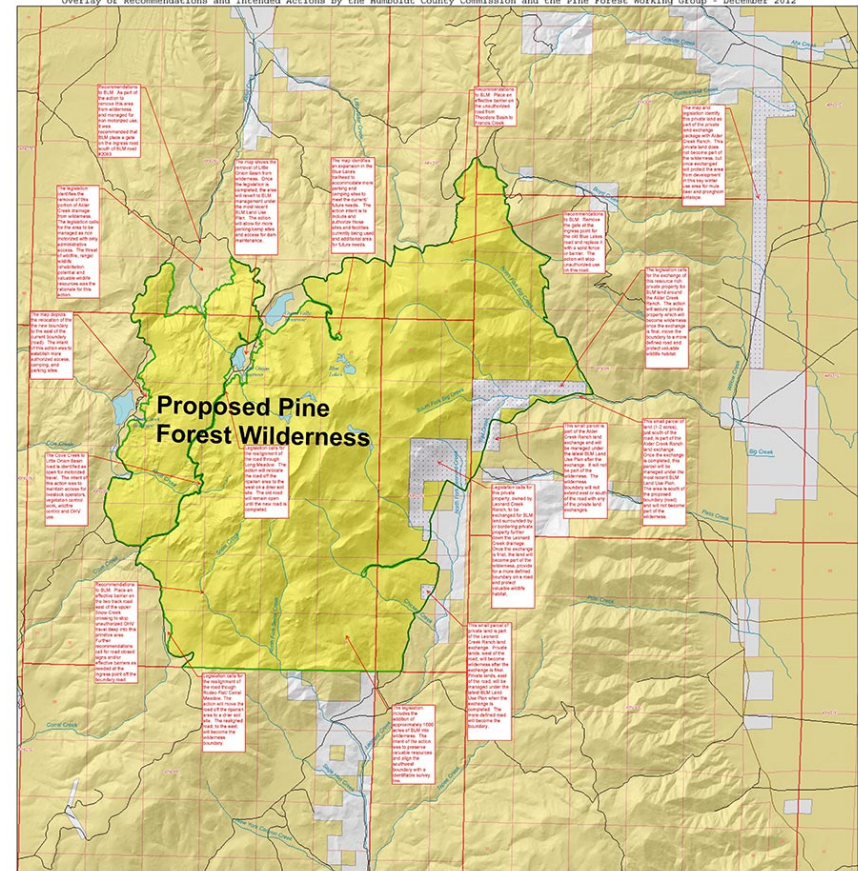
- Pine Forest Range Wilderness (BLM; 2014):
  - 26,000 acres

## Proposed Pine Forest Wilderness Area

July 5, 2011

This map prepared at the request of Senator Harry Reid and Senator Dean Heller.

Overlay of Recommendations and Intended Actions by the Humboldt County Commission and the Pine Forest Working Group - December 2012



Wilderness Area		Land Status	
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Proposed Wilderness	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Bureau of Land Management
<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Non-Federal Lands for Exchange	<span style="background-color: white; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Private
		<span style="background-color: lightblue; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>	Water

0 1 2 4 6 Miles

1:31,250

This map is scaled to be plotted at ANSI E (34 X 44)



No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.





- Wovoka Wilderness (USFS; 2014):
  - 48,981 acres



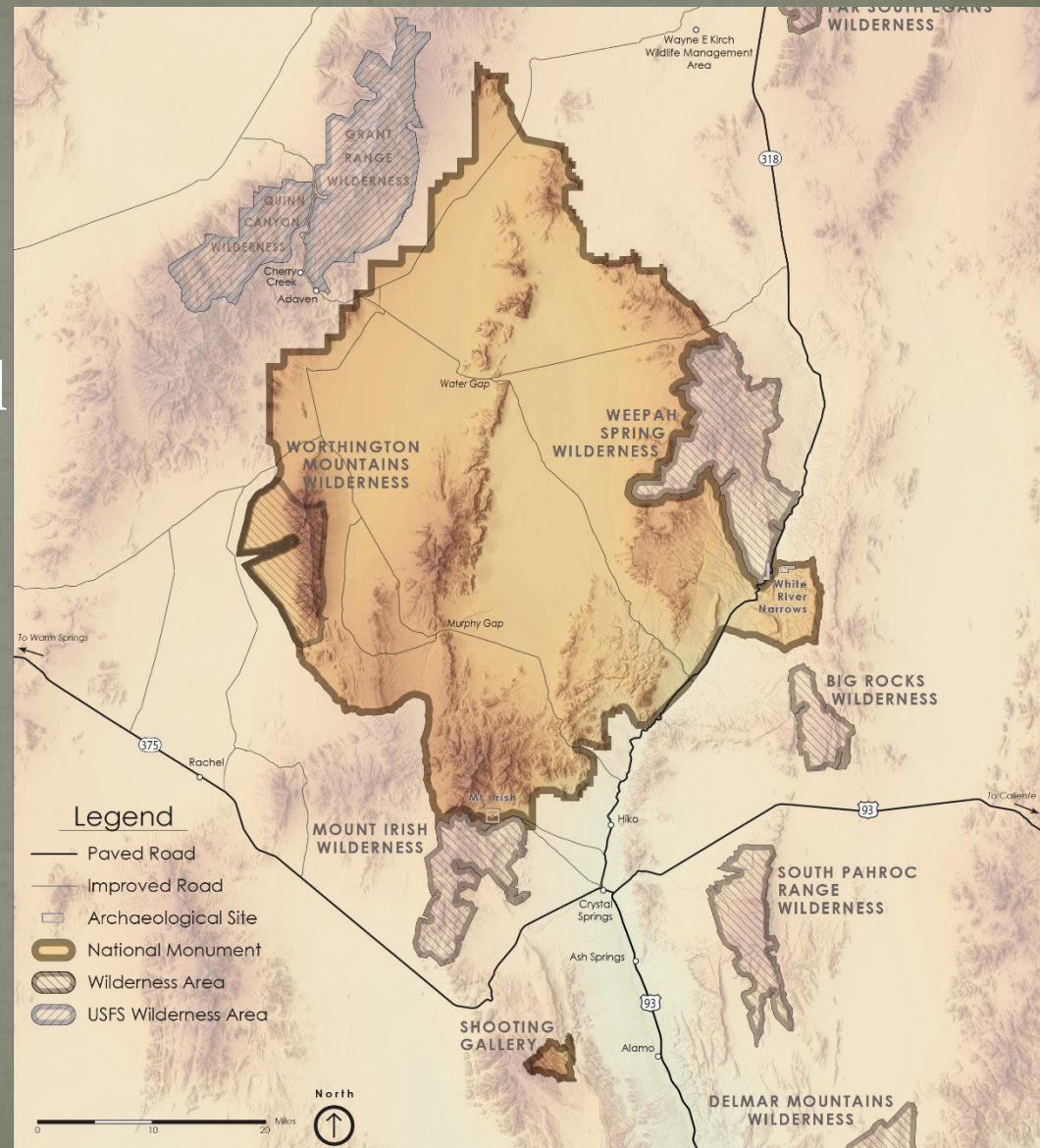
# Withdrawals: 2010 through Present (cont.)

- Basin & Range National Monument

- 704,000 acres

- \* ~15,075 acres already within ACEC area (Mt. Irish ACEC)

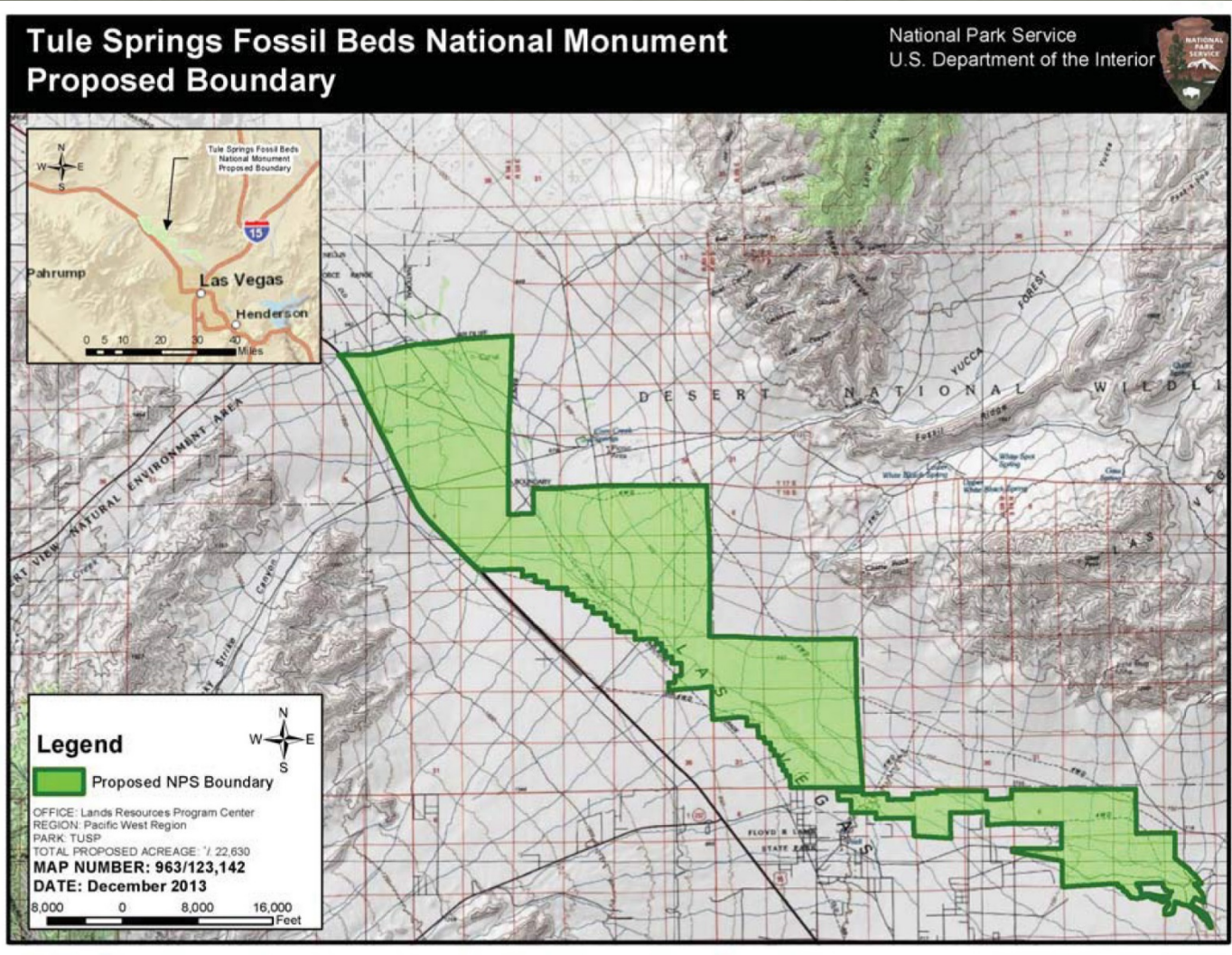
- \* ~30,623 acres already within Wilderness (Worthington Mountains Wilderness)





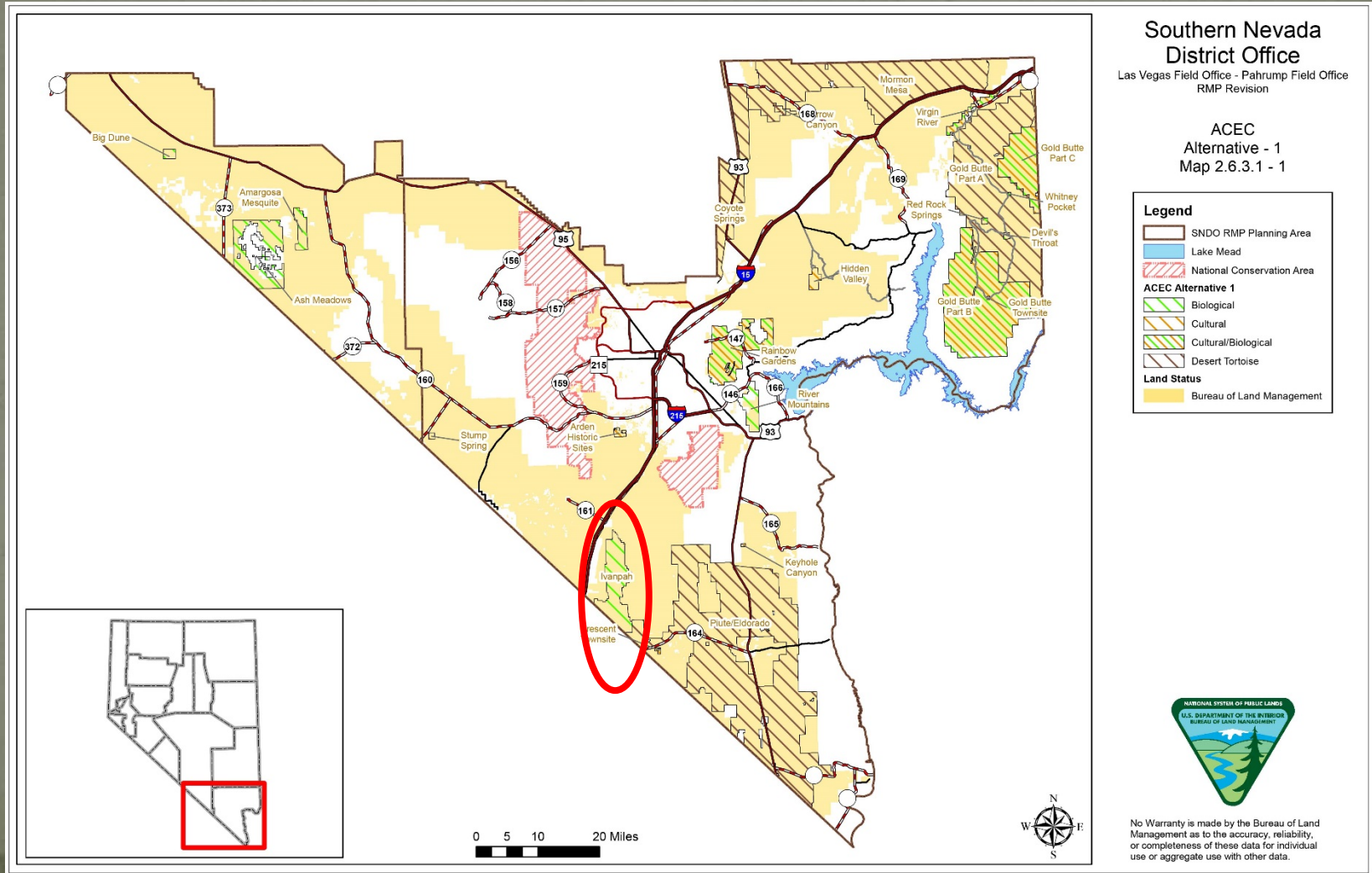
# Withdrawals: 2010 through Present

- Tule Springs National Monument
  - 22,650 acres



# Withdrawals: 2010 through Present (cont.)

- Ivanpah ACEC (Silver State South ROD)
  - 31,857 acres
  - Case File: NVN 085801





# Total Land Area Withdrawals through 2016 (not inclusive of proposed withdrawals)

As a percentage of the entire state:

Year	Acres	Percent of Nevada	
1930	132,247	0.19%	
1940	5,460,598	7.77%	
1950	5,861,114	8.34%	
1960	5,951,860	8.47%	
1970	6,672,218	9.50%	
1980	11,767,565	16.75%	←FLPMA
1990	12,701,336	18.08%	←Wilderness
2000	14,299,822	20.35%	
2010	14,848,842	21.13%	
2016	15,610,982	22.22%	

# Total Land Area Withdrawals through 2016

Land Use	Acres	% of Total Withdrawn	% of Nevada
Wilderness	2,648,752	16.97%	3.77%
Wilderness/National Conservation Area	437,051	2.80%	0.62%
Wilderness/National Park & Recreation Area	297,047	1.90%	0.42%
Wilderness/Research Natural Area	14,949	0.10%	0.02%
Wilderness/Research Natural Area/National Park & Recreation Area	3,987	0.03%	0.01%
Wilderness/Areas of Critical Environmental Concern	3,375	0.02%	0.00%
Wilderness/National Conservation Area/Areas of Critical Environmental Concern	405	0.00%	0.00%
Instant & Wilderness Study Areas	2,674,715	17.13%	3.81%
Instant & Wilderness Study Area/National Park & Recreation Area	57,952	0.37%	0.08%
Instant & Wilderness Study Area/Areas of Critical Environmental Concern	4,439	0.03%	0.01%
Urban Interface	198,483	1.27%	0.28%
Urban Interface/Areas of Critical Environmental Concern	4,455	0.03%	0.01%
Research Natural Area	7,784	0.05%	0.01%
National Conservation Area	1,278,516	8.19%	1.82%
National Conservation Area/Areas of Critical Environmental Concern	8,017	0.05%	0.01%
National Conservation Area/State Park	536	0.00%	0.00%
Areas of Critical Environmental Concern	1,156,379	7.41%	1.65%
Military Area	3,418,626	21.90%	4.87%
Military Area/National Wildlife Range & Refuge	842,727	5.40%	1.20%
National Wildlife Range & Refuge	1,519,326	9.73%	2.16%
Wildlife Management Area	191,685	1.23%	0.27%
National Park & Recreation Area	710,446	4.55%	1.01%
State Park	131,330	0.84%	0.19%
<b>Totals</b>	<b>15,610,982</b>	<b>100.00%</b>	<b>22.22%</b>



# Total Land Area Withdrawals through 2016 (Major Categories)

Land Use	Acres	% of Total Withdrawn	% of Nevada
Military <sub>1</sub>	4,261,353	27.30%	6.06%
Wilderness <sub>2</sub>	3,405,566	21.82%	4.85%
Instant & Wilderness Study Area <sub>3</sub>	2,737,106	17.53%	3.90%
National Wildlife Range & Refuge <sub>4</sub>	1,519,326	9.73%	2.16%
Areas of Critical Environmental Concern <sub>5</sub>	1,156,379	7.41%	1.65%
National Park & Recreation Area <sub>6</sub>	710,446	4.55%	1.01%
National Conservation Area <sub>7</sub>	1,287,069	8.24%	1.83%
Urban Interface <sub>8</sub>	202,938	1.30%	0.29%
Wildlife Management Area <sub>9</sub>	191,685	1.23%	0.27%
State Park <sub>10</sub>	131,330	0.84%	0.19%
Research Natural Area <sub>11</sub>	7,784	0.05%	0.01%
<b>Totals</b>	<b>15,610,982</b>	<b>100.00%</b>	<b>22.22%</b>

1 The Military total includes portions of the National Wildlife Range & Refuge.

2 The Wilderness total includes portions of the National Conservation Area, Research Natural Area, National Park and Recreation, Areas of Critical Environmental Concern, and Wildlife Management Area.

3 The Instant & Wilderness Study Area includes portions of the National Park and Recreation Area and the Areas of Critical Environmental Concern.

4 The National Wildlife Range and Refuge total is only that area not included in the Military Area.

5 The Areas of Critical Environmental Concern total is only that area not included in the Wilderness Area, the Instant and Wilderness Study Area, the Urban Interface Area, and the National Conservation Area.

6 The National Park and Recreation Area total is only that area not included in the Wilderness Area and the Instant and Wilderness Study Area.

7 The National Conservation Area total includes portions of the Areas of Critical Environmental Concern and State Park Area.

8 The Urban Interface Area total includes portions of the Areas of Critical Environmental Concern.

9 The Wildlife Management Area total is only that area not included in the Wilderness Area.

10 The State Park Area total is only that area not included in the National Conservation Area.

11 The Research Natural Area total is only that area not included in the Wilderness Area.

# Pending Withdrawals

- BLM Wilderness:
  - Washoe County Wilderness Designation: 449,170 acres designated wilderness & ~142,916 acres of WSA released.  
\*a large portion of WSA is being converted to wilderness . This area is not included in the total below.
  - Washoe County Land Transfer: 160,825 acres converted from BLM/USFS to County.
- DOD Expansions:
  - Nellis Test and Training Range (NTTR): ~301,000 acres
  - Fallon Naval Air Station: ~604,789 acres
- National Monuments:
  - Gold Butte: ~350,000 acres  
\*Gold Butte NM is already located within an ACEC. This area will not be included in the total below.

Continued on next slide



# Pending Withdrawals (cont.)

- Other
  - Carson City RMP Revision: 3,700 – 470,600 acres additional land withdrawn from mineral entry
    - \*Carson City District Draft RMP & EIS, pg.2-9; Nov., 2014
  - Sage-grouse Focal Areas: 2,730,826 acres
    - \*~150,000 acres already within withdrawn lands

Total pending withdrawn land: 3,651,140 - 4,118,040 acres  
% of Nevada: 5.20% – 5.86%

# Current Proposed Nevada Land Withdrawals (Oct 2016)\*

Sage-Grouse Focal Areas

Washoe Wilderness & WSA Release\*\*

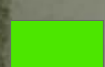
Washoe Land Transfer

Fallon NAS Expansion

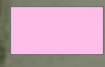
Nellis TTR Expansion

Gold Butte\*\*\*

## Legend



Washoe County WSA to  
Wilderness



Washoe County Land  
Transfer



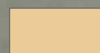
Washoe WSA Release



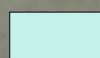
Gold Butte ACECs



Nevada Test & Training  
Range Proposed  
Expansion



Fallon Range Training  
Complex Expansion



Sage-Grouse Focal  
Areas (SFAs)

\*Carson City RMP Revision not displayed

\*\* Most of this area was already contained within WSA.

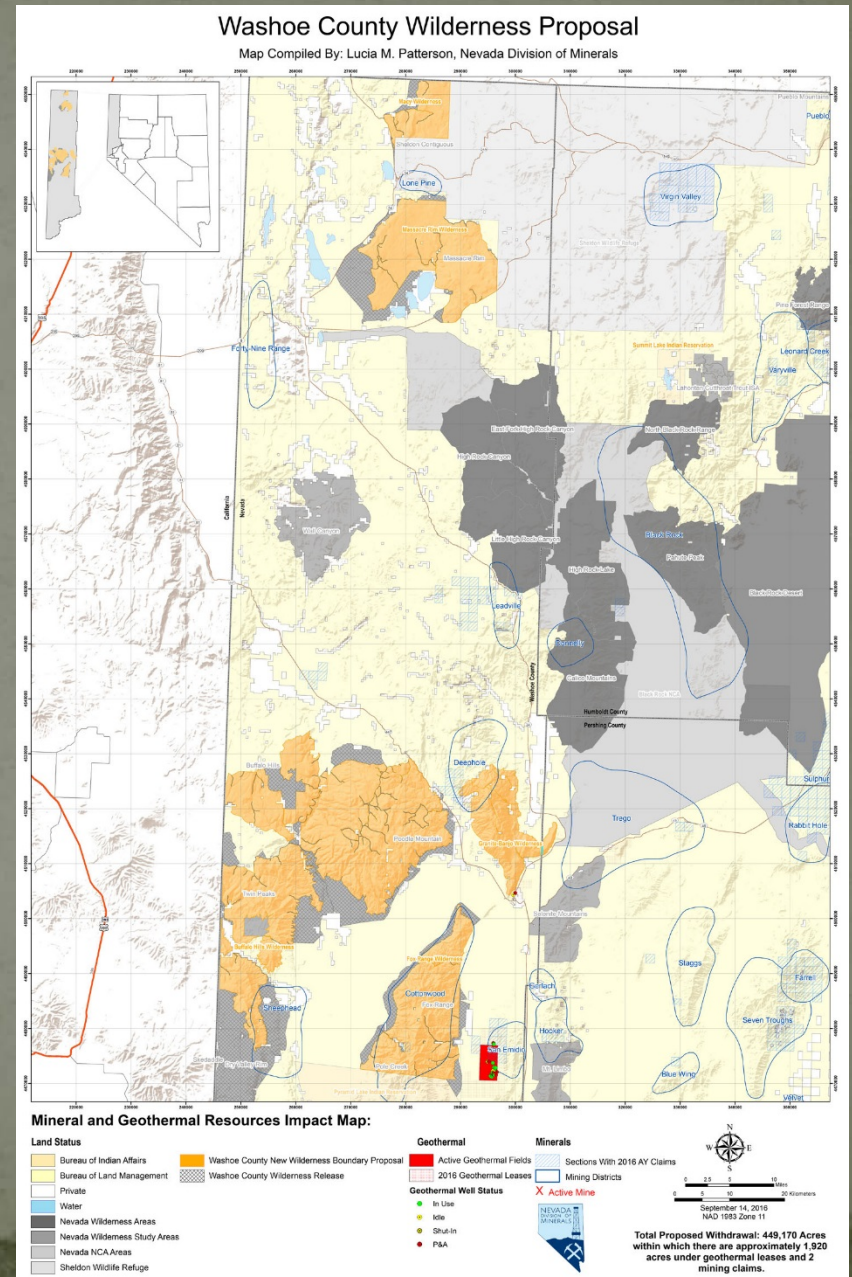
\*\*\* This area contains the Gold Butte ACECs and is not the defined Gold Butte Monument boundary (data not yet available).



# Pending Withdrawals: 2010 through Present

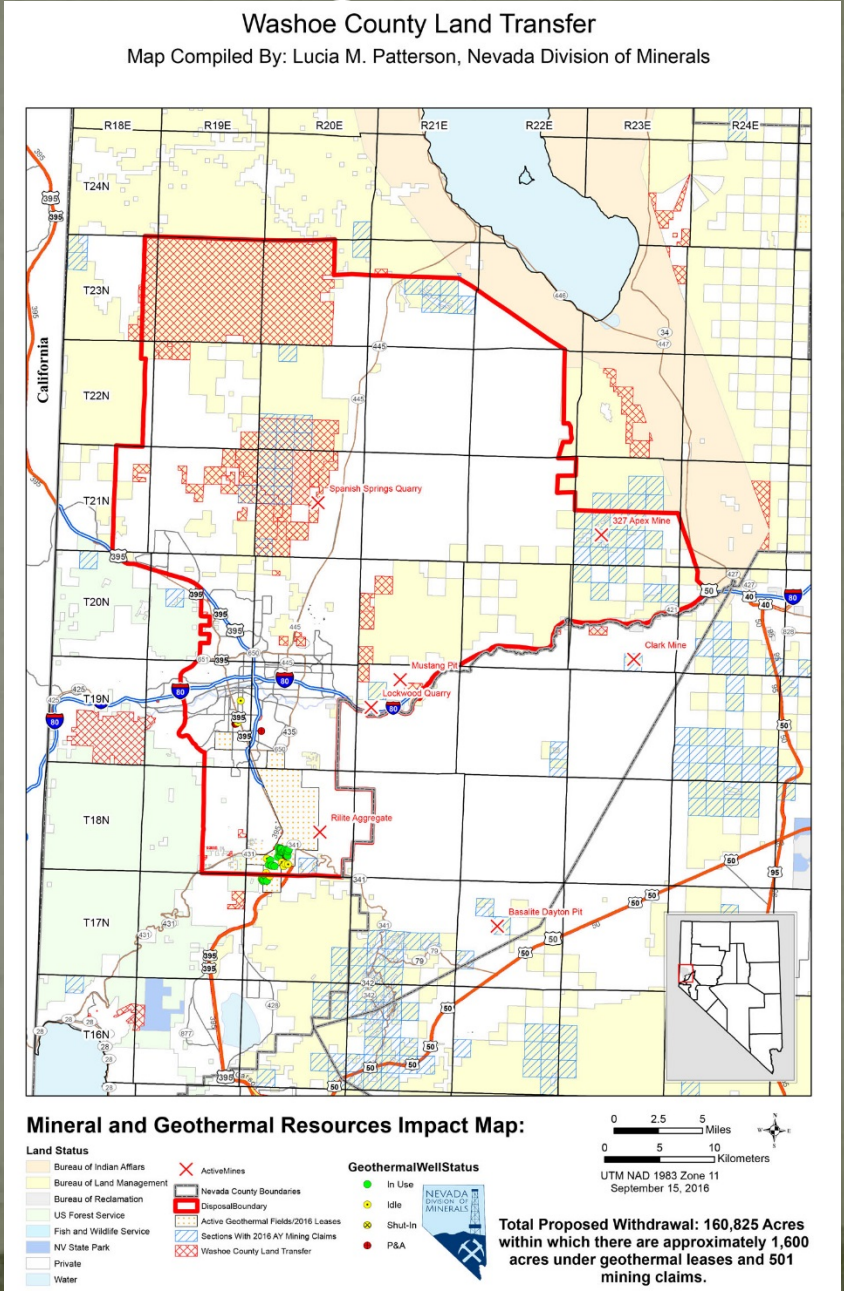
- Washoe County Wilderness with WSA Release
  - 449,170 acres designated wilderness
  - ~142,916 acres of WSA released

\*a large portion of WSA is being converted to wilderness . A net gain/loss of lands has not yet been established, therefore this withdrawal is not factored into any statistics.



# Pending Withdrawals: 2010 through Present

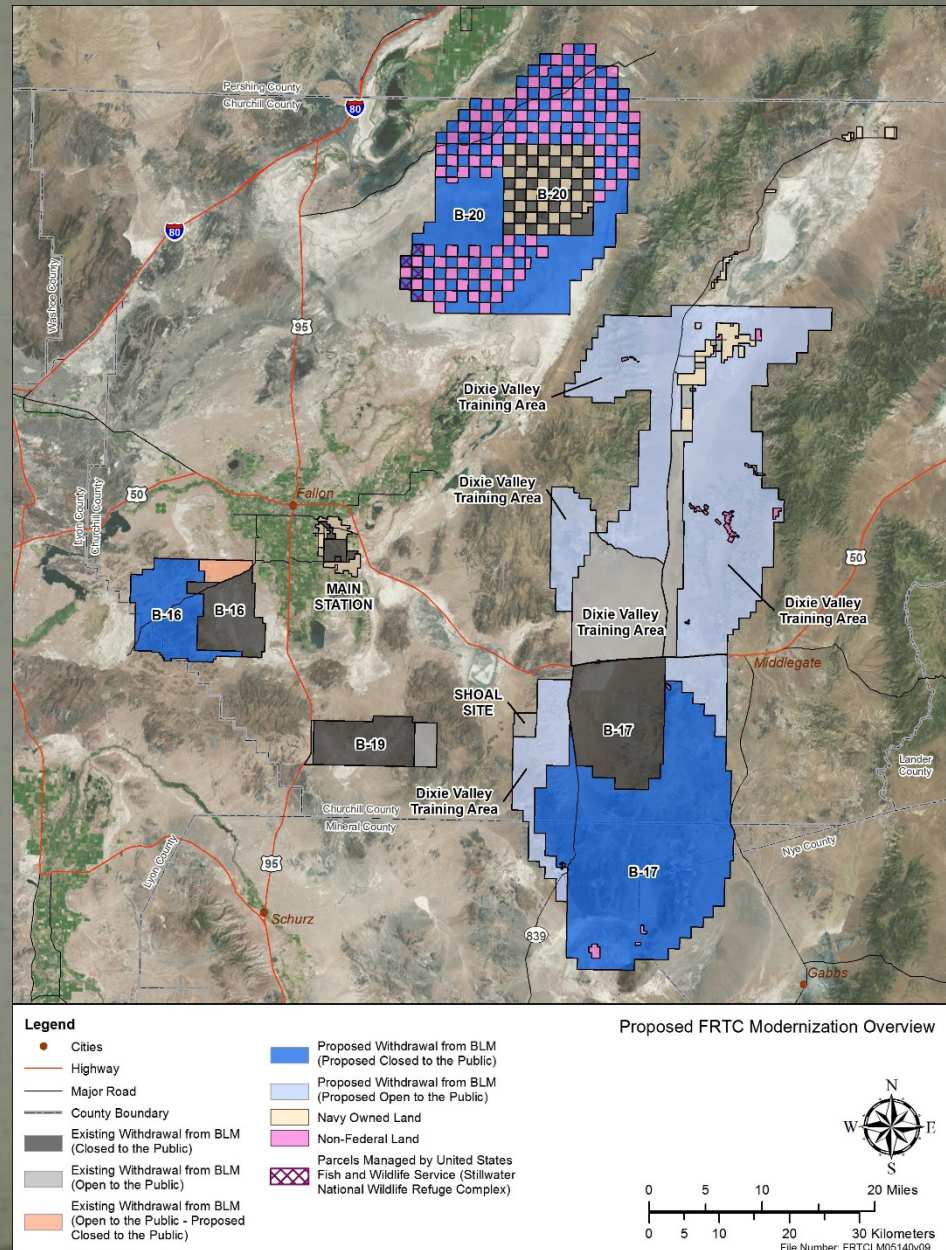
- Washoe County Land Transfer
  - ~160,825 acres converted from BLM/USFS to private.





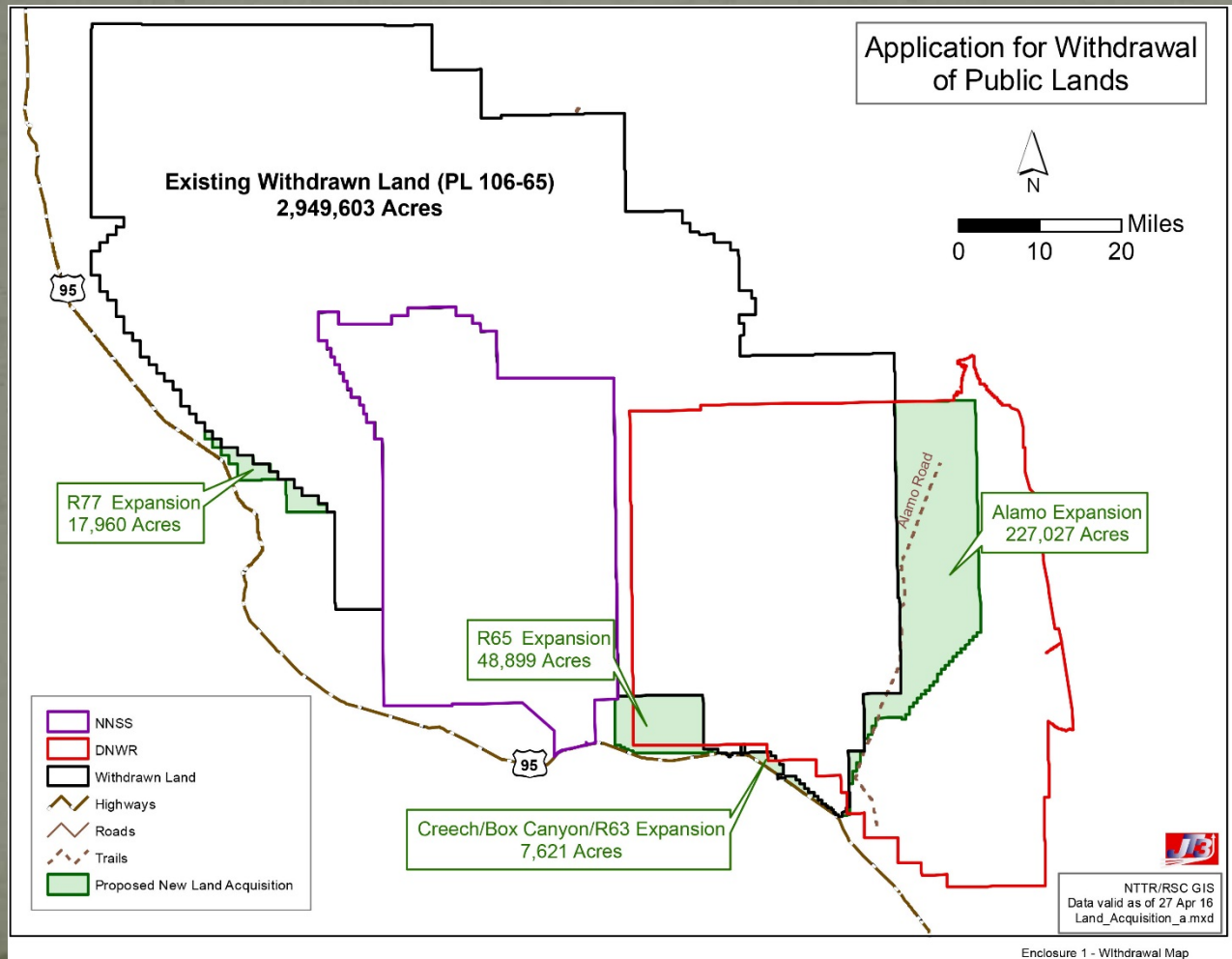
# Pending Withdrawals: 2010 through Present (cont.)

- Naval Air Station (NAS) Fallon Expansion
  - ~604,789 acres



# Pending Withdrawals: 2010 through Present

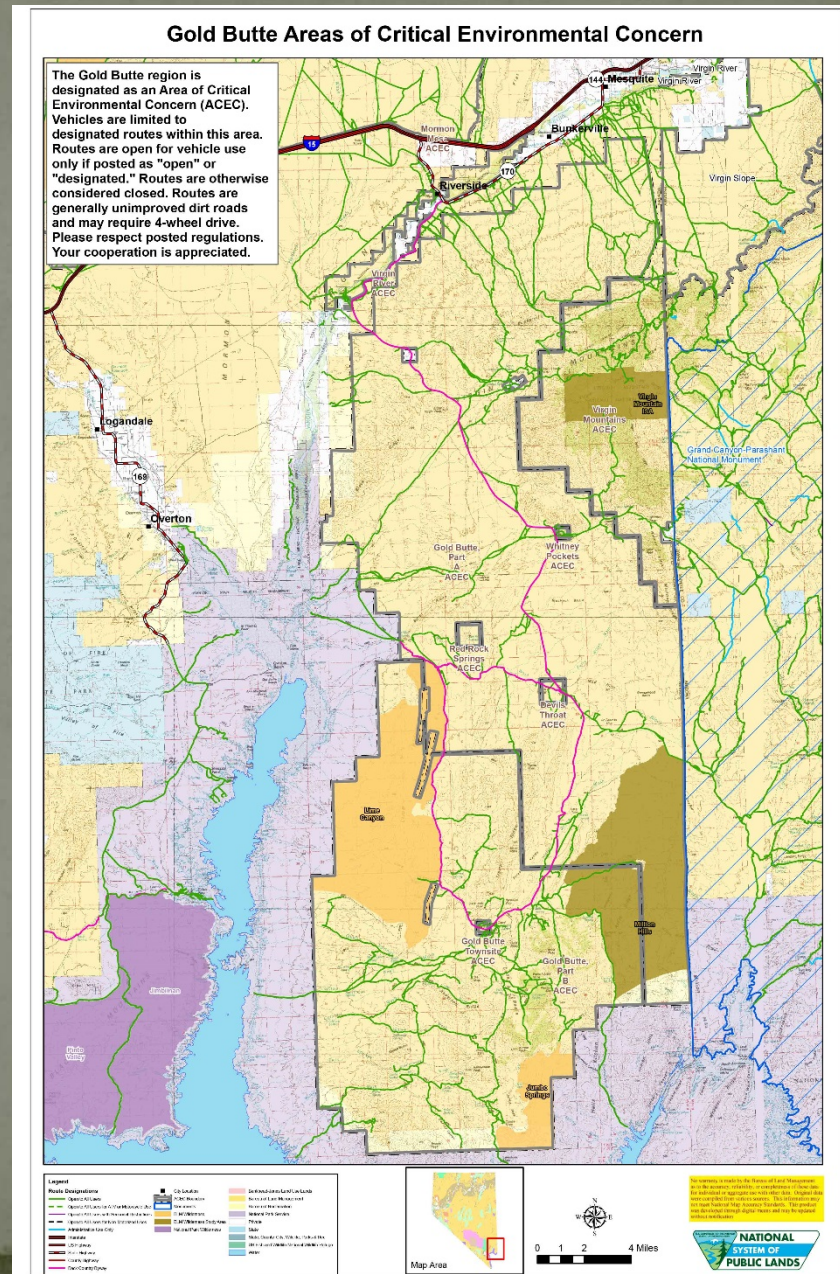
- Nellis Test and Training Range (NTTR)
  - ~301,000 acres





# Pending Withdrawals: 2010 through Present (cont.)

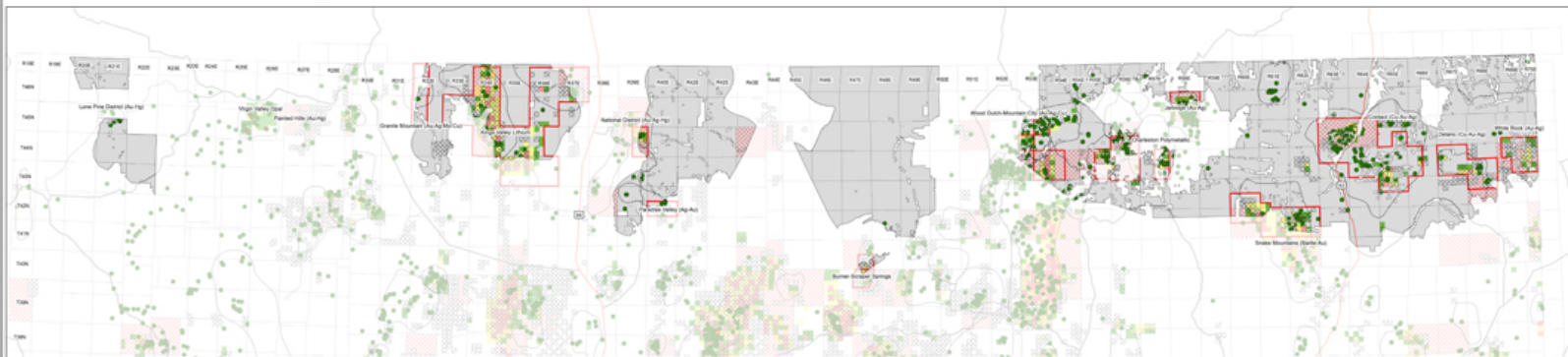
- Gold Butte National Conservation Area
- ~350,000 acres



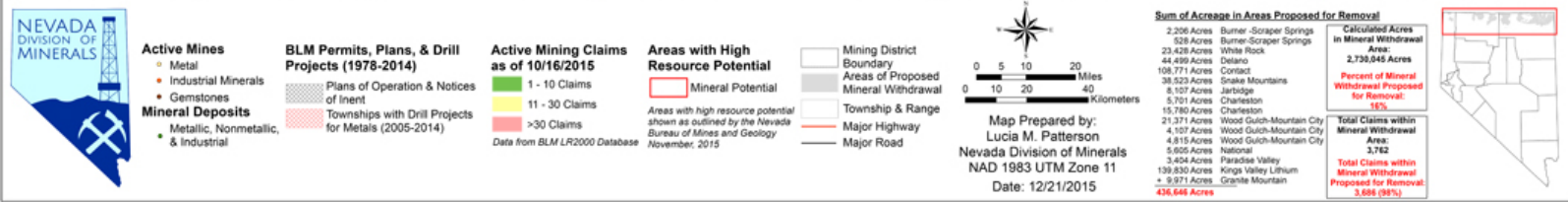
# Pending Withdrawals: 2010 through Present (cont.)

- Sage-Grouse Focal Areas (SFAs)
- 2,730,826 acres

Minerals/Mining Potential in Sagebrush Focal Areas

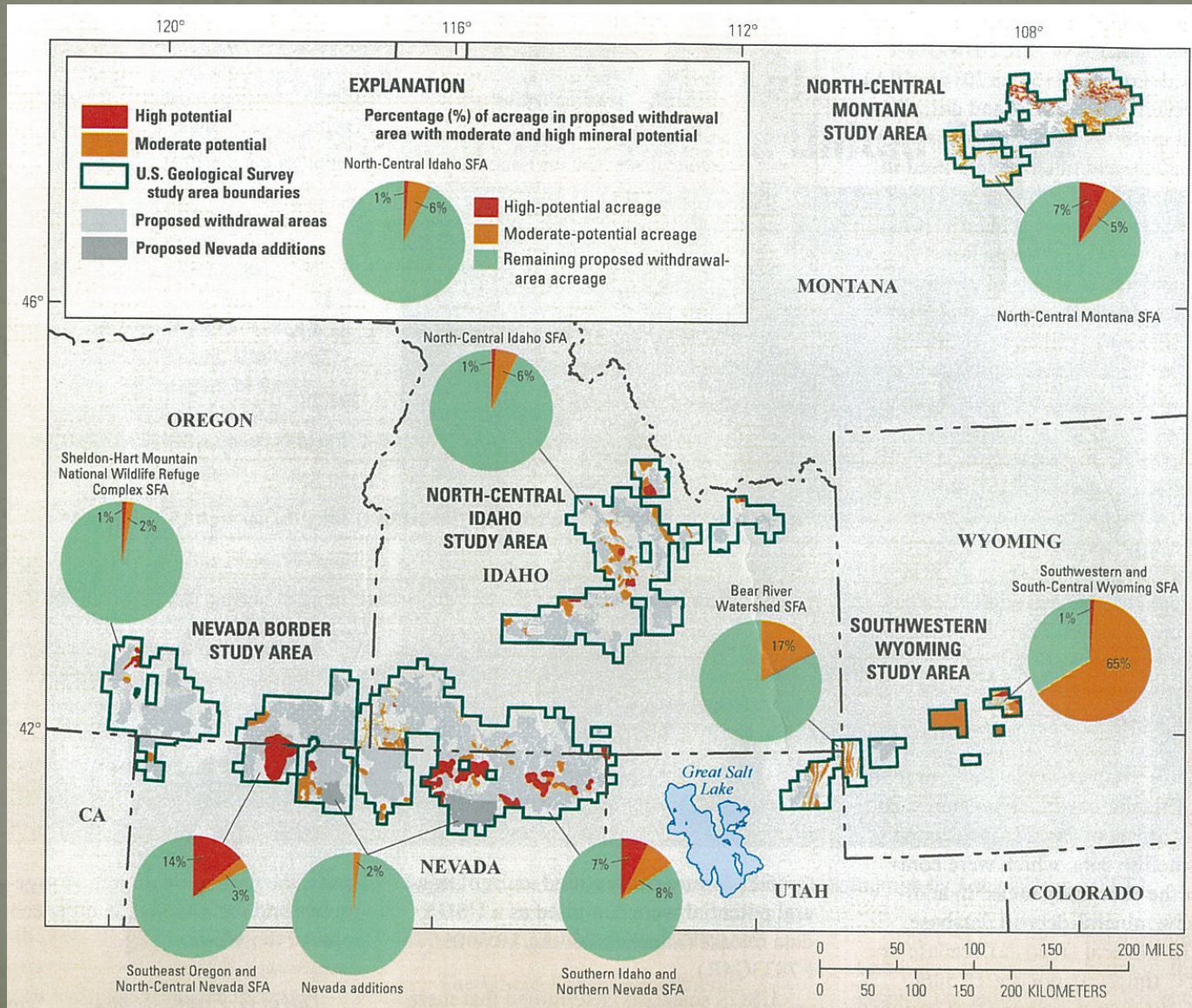


Areas of High Mineral Potential in Sagebrush Focal Areas; Acreage in Areas Proposed for Removal





# Potential for Locatable Minerals in Proposed SFA Withdrawal Areas









# Limited-use Areas

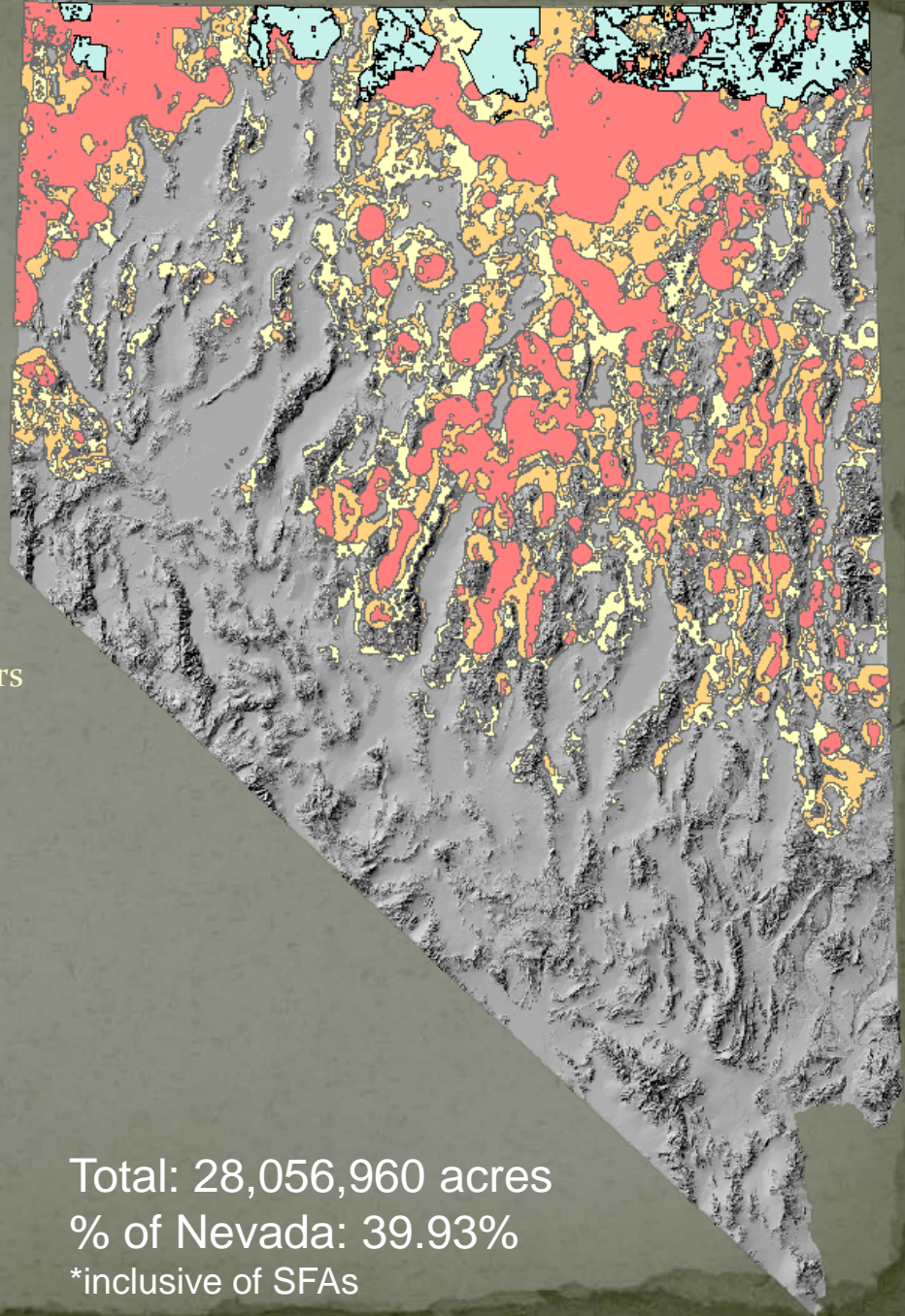
- Sage-grouse Areas:
  - SFAs: ~ 2,730,826 acres  
\*included within PHMA; some of this area is already within withdrawn land.
  - PHMA: ~12,417,986 acres
  - GHMA: ~7,944,037 acres
  - OHMA: ~7,694,937 acres  
\*Values calculated from clipped BLM GIS layers containing CA & NV GSG areas.

## Legend

-  Sage-Grouse Focal Areas (SFAs)
-  GSG Priority Habitat Management Areas
-  GSG General Habitat Management Areas
-  GSG Other Habitat Management Areas

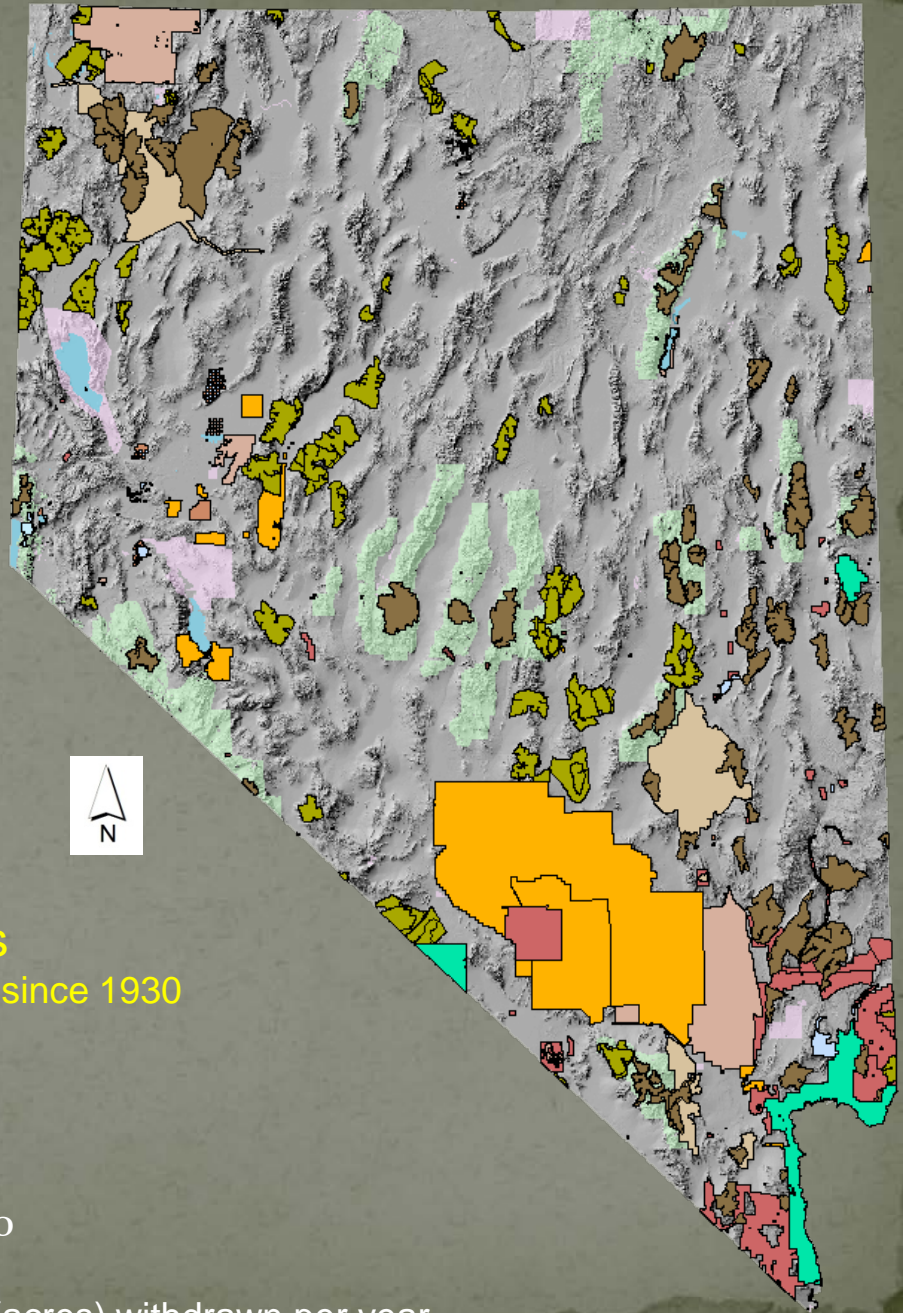
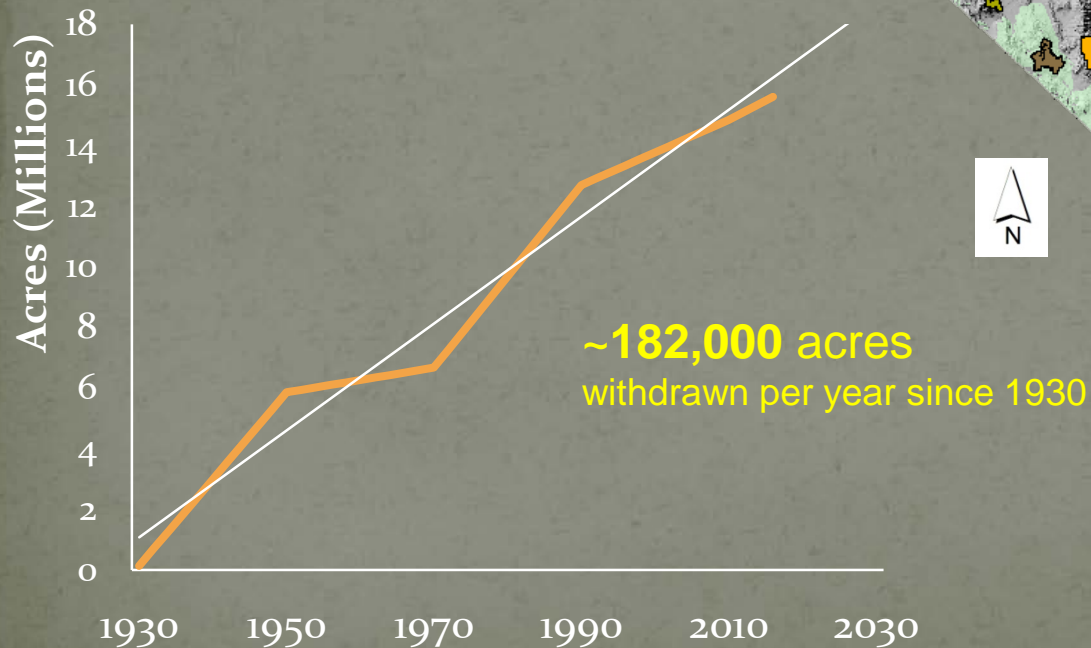
Note: Habitat Management Areas include several types of lands including previously withdrawn lands & private land.

Total: 28,056,960 acres  
% of Nevada: 39.93%  
\*inclusive of SFAs





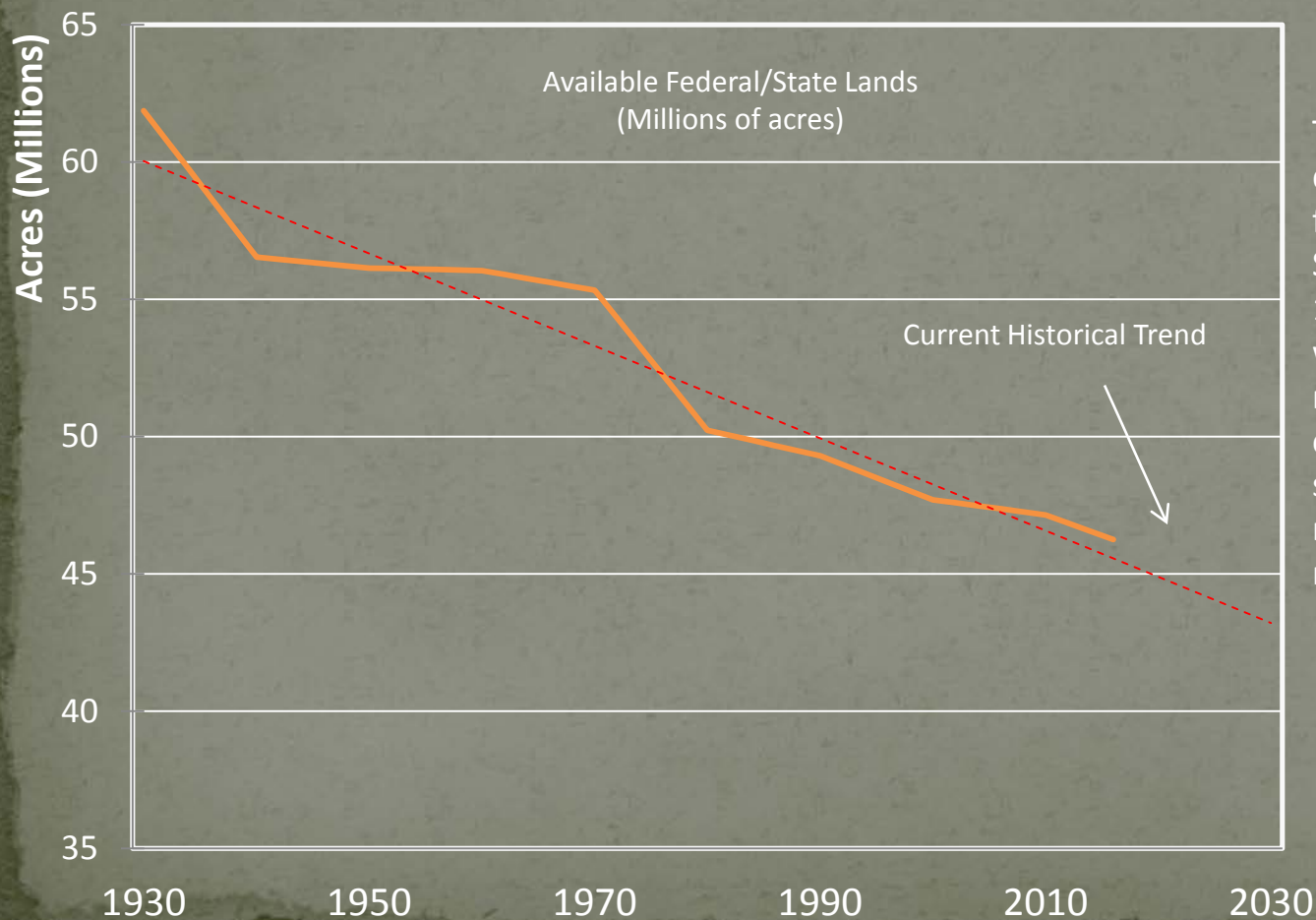
# Nevada Land Withdrawals through 2016



Line graph displaying the trend in the amount of land (acres) withdrawn per year.

# Current Historical Trend

(Summary Result)



The chart to the left depicts the decrease in available federal/state lands by decade. Since 1930, approximately 1,815,230 acres of land are withdrawn every 10 years from mining use. By 2060, at the current trend, almost half of the state will be withdrawn from mining use leaving less than 40 million acres available.



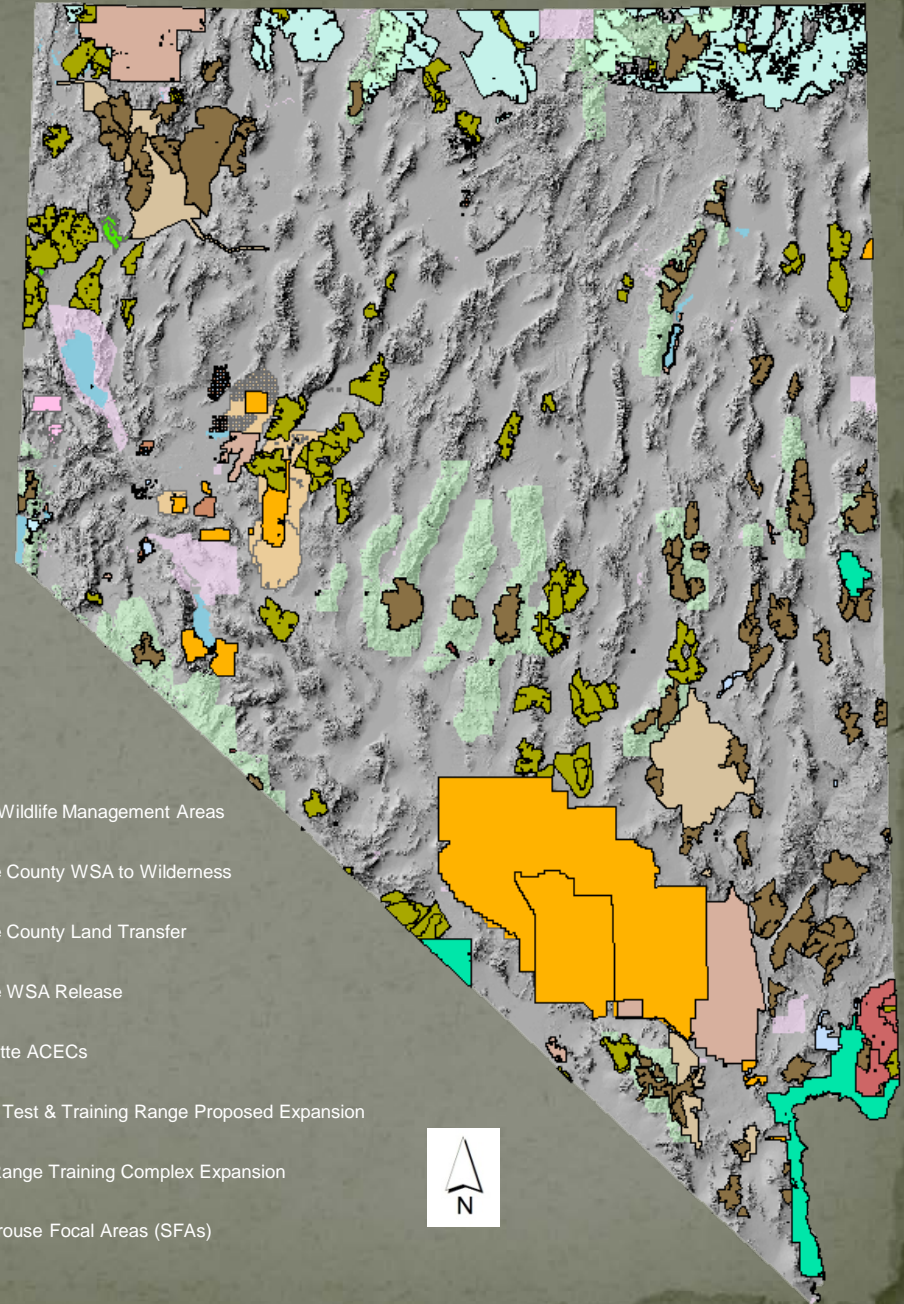
# Land Area Totals (through 2016; Inclusive of proposed withdrawals (including SFAs – Pending EIS))

As a percentage of the entire state:

Year	Acres	Percent of Nevada	
1930	132,247	0.19%	
1940	5,460,598	7.77%	
1950	5,861,114	8.34%	
1960	5,951,860	8.47%	
1970	6,672,218	9.50%	
1980	11,767,565	16.75%	←FLPMA
1990	12,701,336	18.08%	←Wilderness
2000	14,299,822	20.35%	
2010	14,848,842	21.13%	
2016	15,610,982	22.22%	←SFAs
2018	19,729,022	28.08%	

# Current and Proposed Withdrawals as of 2016

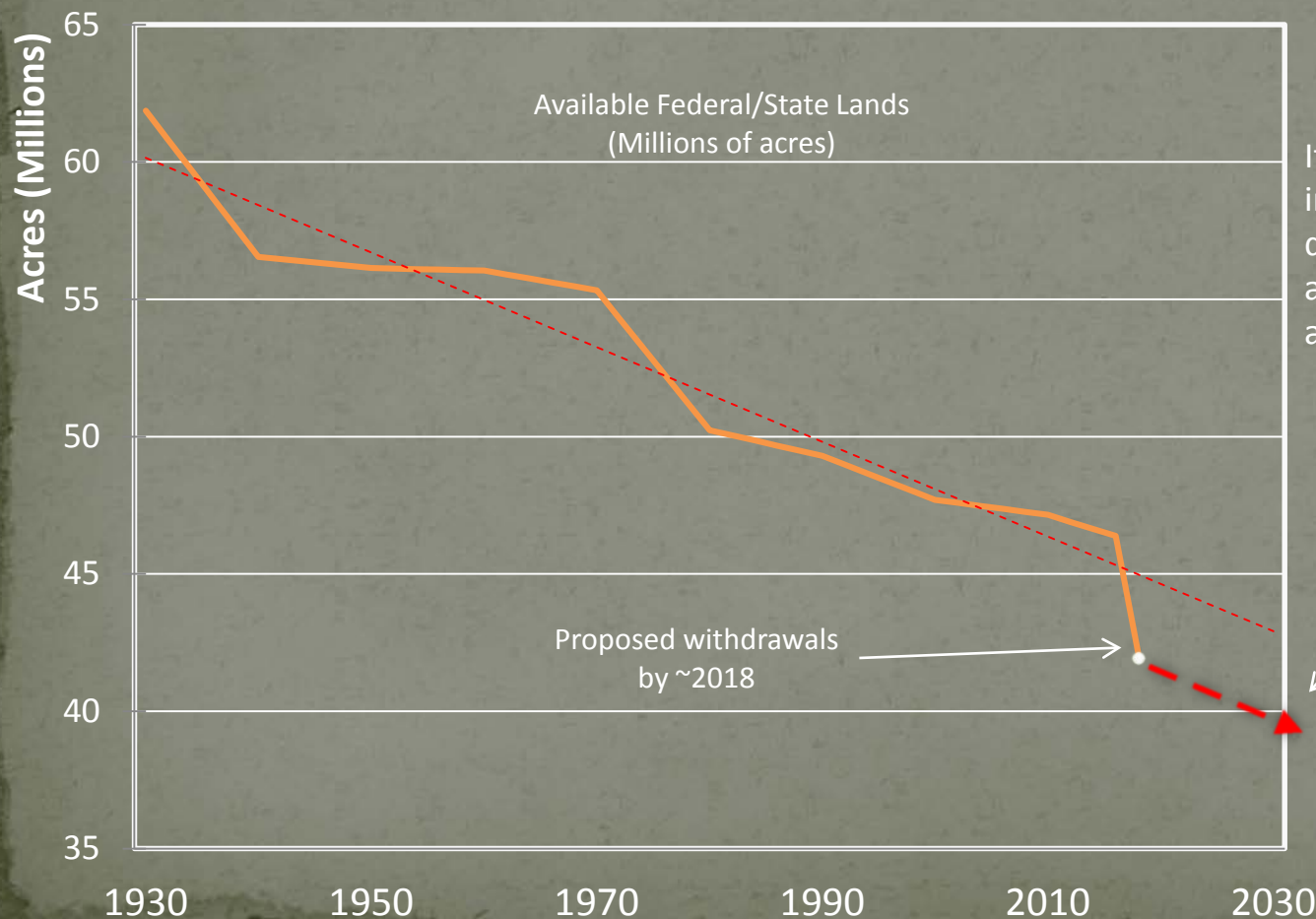
## Legend





# Current Historical Trend (including SFAs and proposed withdrawals)

(Summary Result)



If all proposed withdrawals are included, and the SFA boundary does not change, then the average withdrawal per decade is about 2,294,070.

Current Trend

2016 Update

# Nevada Land Withdrawals from Mineral Entry A Historical Perspective

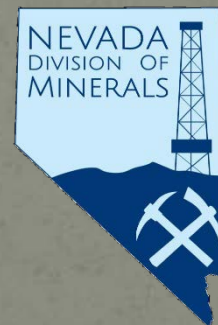
For more information, contact the Division of Minerals at:  
**[ndom@minerals.nv.gov](mailto:ndom@minerals.nv.gov)**

---



University of Nevada, Reno

Modified from original study in 2011 by:  
S. Bassett, I. Morrison, and K. Berry  
Department of Geography  
Mackay School of Earth Sciences and Engineering,  
College of Science  
University of Nevada, Reno



Updated in October, 2016 by:  
Dennis Bryan  
Nevada Commission on Mineral Resources  
&  
Garrett A. Wake  
Nevada Division of Minerals