

Montana Spatial Data Infrastructure (MSDI)

Administrative Boundary Update

Meghan Burns, Montana State Library

Thursday, April 7 @ 11:45am - 12:15pm

2022 Big Sky GeoCon, Missoula, Montana



OUTLINE

Managed Areas Update

MSDI Boundary Updates

- Data Layer Updates
- New Data Layers and Services
- Planned Updates

U.S. Census Bureau Program Updates

- Boundary and Annexation Survey (BAS)
- School District Review Program (SDRP)



Managed Areas Update

Managed Areas Update

Background

- In 1997 the Montana Natural Heritage Program (MTNHP) began integrating ownership and management data into a land stewardship mapping data system
- The goal was to manage a single, statewide digital dataset that incorporated information from both public and private entities. The project assembled information on land ownership and management, conservation easements, state and federal agencies, and land trusts
- In 2016 the Montana State Library assumed management of the Managed Areas data layer as part of the Boundaries Theme. MSL was already maintaining the Public Lands and Conservation Easements in partnerships with the Montana Department of Revenue as part of the Cadastral Theme

Managed Areas Update

Management Types

Federal

USFWS

- National Wildlife Refuges
- Wilderness

USDA

- Forest Service Special Interest Management Areas
- Wilderness ALPS/WSA
- Wild and Scenic Rivers

BLM

- Outstanding Natural Areas
- Wild and Scenic Rivers
- Wilderness Areas
- Wilderness Study Areas

State

MT-DNRC State Forest

MTFWP

- State Parks
- Wildlife Management Areas
- Fishing Access Sites

Tribal

Reservations

Tribal Lands

Private

The Nature Conservancy (TNC) Fee Management Units

Managed Areas Update

- All areas were reviewed and updated
- See the SourceDate field for the last date that source data was reviewed
- Reprojected to Montana State Plane NAD83 (2011) Meters projection (WKID: 6514)
- GAP Status Code field from PAD-US was added

Managed Areas Update

- US Forest Service: Ranger District Name Changes
- Bureau of Land Management
 - New Areas of Critical Environmental Concern (ACEC)
 - New Wilderness Study Areas: Beaver Meadows, Eighteen Mile
- Montana Fish, Wildlife, and Parks: Fishing Access Sites
 - Corwin Springs renamed Brogan's Landing
 - WW White Memorial FAS renamed C. Ben White Memorial FAS
 - Selway Park **NEW!**
- Tribal
 - Bison Range now managed by CSKT (Formerly USFWS)
 - Safe Harbor Marsh Preserve now managed by CSKT (Formerly TNC)
 - Tribal Trust Land added
- Now full boundaries for areas that extend outside of Montana
 - Example: Yellowstone National Park
- The Nature Conservancy Preserves are now Fee Management Units

Managed Areas Update

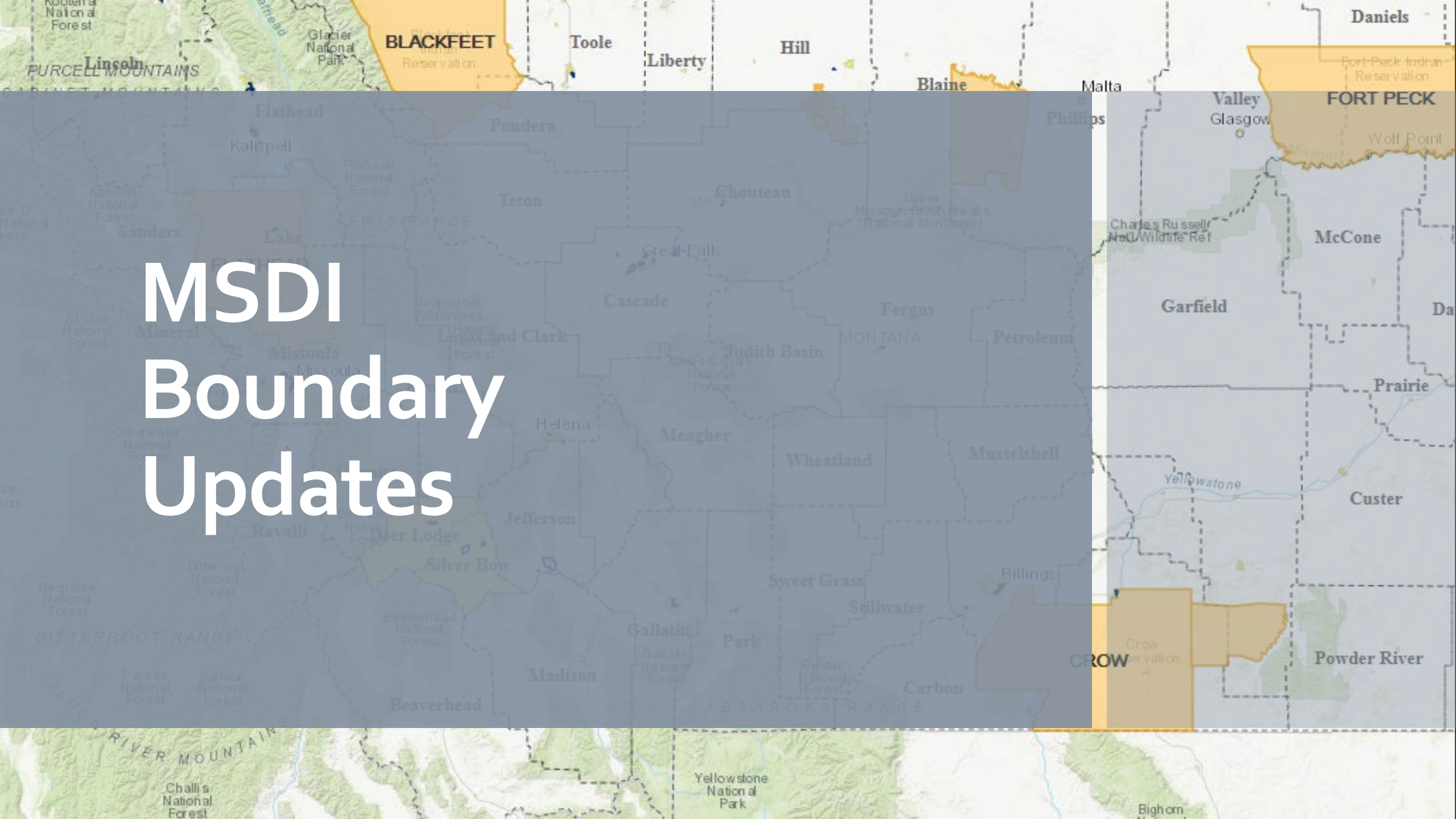
- Available for Download and as a Web Service
- Discoverable in:
 - Data List
 - Digital Atlas
 - Data Bundler
 - Map Gallery
 - MTNHP Natural Heritage MapViewer
 - MSDI Boundary website
<https://msl.mt.gov/GIS/Boundaries>

Managed Areas Update

Next Steps

- Working with USGS to update Protected Areas Database (PAD-US) with Montana updates
- PAD-US Version 3.0 Coming Soon
- Add GAP Code Source Field
 - In the absence of other information, USGS assigns GAP Status Codes categorically by Designation Type
 - USGS seeks partners to review and refine conservation measures by designation type, manager, or unit - Contact the PAD-US Team at pad-us@usgs.gov for more information.
 - The “GAP Code Source” field in the PAD-US provides a general classification method reference, for example:
 - ‘GAP - Default’ (categorical assignment by Designation Type, Table 12)
 - ‘GAP’ (Management plan review and assignment following dichotomous key in the reference document).
 - ‘TNC’

MSDI Boundary Updates



MSDI BOUNDARY UPDATES

Current Core MSDI Boundary Layers

- Incorporated Cities/Towns
- Counties
- Weed Districts
- Tribal Nations Reservations
- Off Reservation Trust Land **NEW!**
- School Districts
- State Boundary
- Tax Increment Financing Districts (TIFDs)
- Voting Precincts
- Congressional Districts **NEW!**
- Montana Legislative Districts (House and Senate) **NEW!**
- Download Data Layers
- Web Services
- Find Metadata, Data, Web Maps, & Web Services links here:
<https://msl.mt.gov/GIS/Boundaries>
- Data also discoverable in the Data List:
<https://msl.mt.gov/GIS/DataList>

MSDI BOUNDARY UPDATES

Data Layer Updates

- As of July 2021 update, all data layers are published in: NAD 1983 (2011) StatePlane Montana FIPS 2500 (Meters)
- All layers were aligned to the 2021 CadNSDI
- A new unique ID field (ID_UK) was added to each layer, replacing the GUID fields
- All layers were reviewed and updated

See complete list of updates at:
<https://msl.mt.gov/GIS/Boundaries>

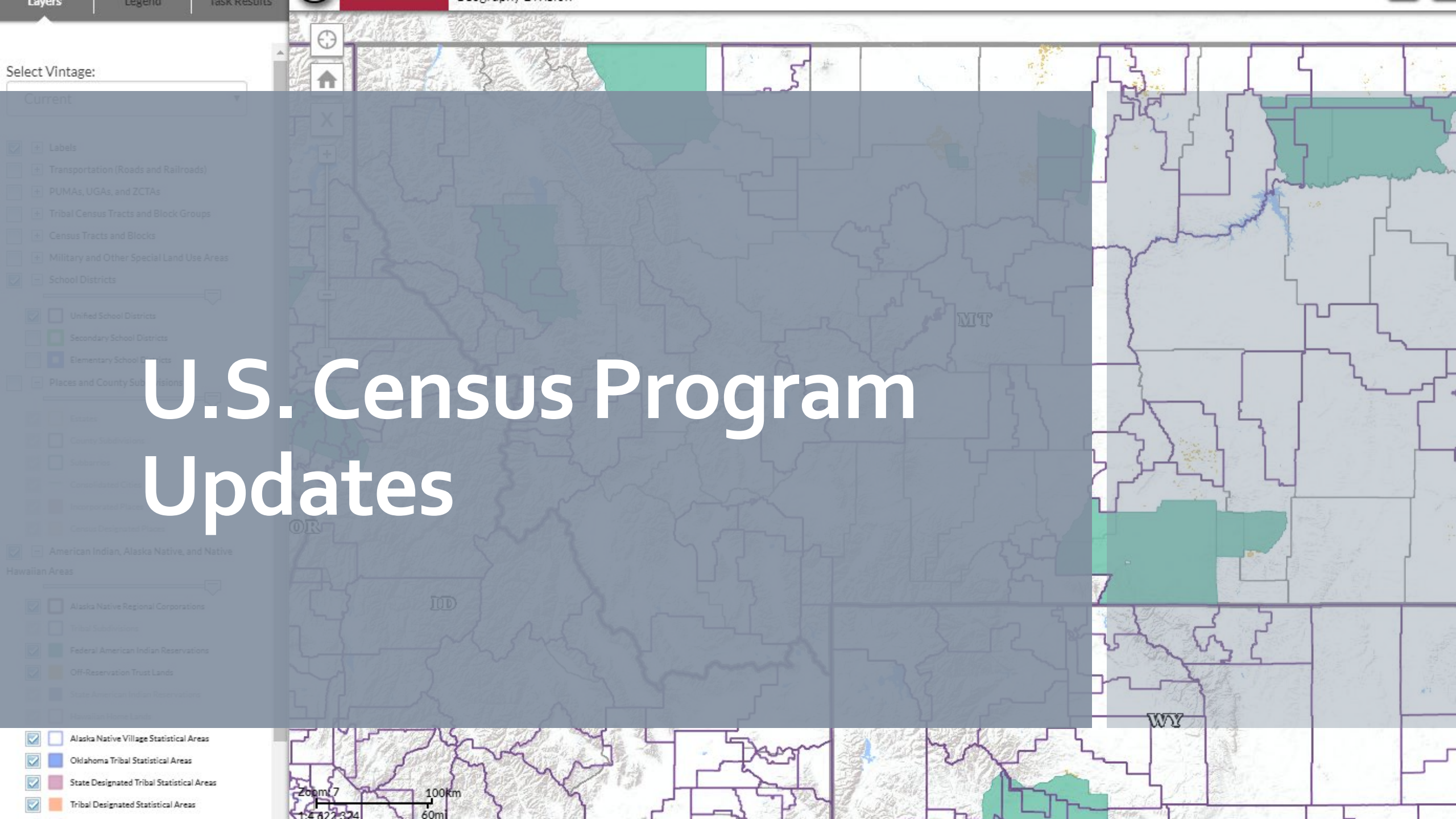
MSDI BOUNDARY UPDATES

Planned Updates

- Partnering with the Secretary of State to Create Data Layers for all Election Districts
- Layers will be Available for Download & Web Services

Complete List of Districts

- Ambulance/EMS
- Cemetery
- Citywide
- Community Council
- Congressional
- County Commissioner
- Countywide
- Drainage
- Fire
- House District
- Irrigation
- Judicial
- Jury
- Library
- Mosquito
- Park and Recreation
- Voting Precincts
- Public Hospital
- Public Service Commission
- Resort
- Rural
- Rural Improvement
- School
- School Single Member Trustee
- Senate District
- Sewer
- Soil Conservation
- Special
- Statewide
- Study Commission
- Supreme Court Justice
- Transportation
- Ward
- Water



U.S. Census Program Updates

Select Vintage:
Current

- Labels
- Transportation (Roads and Railroads)
- PUMAs, UGAs, and ZCTAs
- Tribal Census Tracts and Block Groups
- Census Tracts and Blocks
- Military and Other Special Land Use Areas
- School Districts
 - Unified School Districts
 - Secondary School Districts
 - Elementary School Districts
- Places and County Subdivisions
 - Estates
 - County Subdivisions
 - Suburbs
 - Consolidated Cities
 - Incorporated Places
 - Census Designated Places
- American Indian, Alaska Native, and Native Hawaiian Areas
 - Alaska Native Regional Corporations
 - Tribal Subdivisions
 - Federal American Indian Reservations
 - Off-Reservation Trust Lands
 - State American Indian Reservations
 - Hawaiian Home Lands
- Alaska Native Village Statistical Areas
- Oklahoma Tribal Statistical Areas
- State Designated Tribal Statistical Areas
- Tribal Designated Statistical Areas

200m 7 100km 60m

U.S. CENSUS PROGRAM UPDATES

U.S. Census Bureau Program Updates

- Boundary and Annexation Survey (BAS)
- School District Review Program (SDRP)

U.S. CENSUS PROGRAM UPDATES

Boundary and Annexation Survey Program (BAS)

- Annual Program
- BAS Schedule
 - January 1: Changes must be legally in effect on or before
 - March 1: Changes will be reflected in ACS/PEP
 - May 31: Deadline to submit changes to be included in next year's BAS material
- All Places (Cities, Towns, Counties) are asked to participate
- Even if you do not have changes, please respond to the survey with "No Changes" and review and update your contact information

<https://www.census.gov/programs-surveys/bas.html>

U.S. CENSUS PROGRAM UPDATES

Boundary and Annexation Survey Program (BAS)

Survey Response Options

- No Changes: Online Form
- Boundary Updates:
 - BAS Partnership Toolbox (using your software)
 - GUPS (Census provided software)
 - Paper BAS (Use map sheets provided by Census)

View and Download Data

- Legal Boundary Change/Annexation Data 1980 – 2021

<https://www.census.gov/geographies/reference-files/time-series/geo/bas/annex.html>

- TIGERweb Applications (Interactive Web App)

<https://tigerweb.geo.census.gov/tigerweb/>

U.S. CENSUS PROGRAM UPDATES

School District Review Program (SDRP)

- Annual Program
- Schedule
 - June: Designate a School District Mapping Coordinator (me) that works with OPI and County Superintendents to verify and update:
 - Boundaries
 - Names
 - Grade Level
 - September: Receive instructions and materials
 - December: Deadline to submit changes
 - April: Verification Phase

<https://www.census.gov/programs-surveys/sdrp.html>

Meghan Burns

MSDI Administrative Boundaries Theme Steward

BAS State Certification Officer

School District Mapping Coordinator

Montana State Library

(406) 444-1550

MBurns2@mt.gov

<https://msl.mt.gov/GIS/Boundaries>

