



# Solid Waste Management Facility Siting Study

Solid Waste Advisory Committee (SWAC) Meeting

May 6, 2025





# Agenda

1. Introductions/Welcome
2. Public Comment
3. Overview of Landfill Siting Background, Process, and Recommendations
4. Moon Pit Property Negotiation Update
5. Board of County Commissioner Meeting and Direction
6. Alternate SWMF Sites
7. SWAC Recommendation on Path Forward
8. Adjourn



# Introductions / Welcome



# SWAC Members

## City Representatives (Primary / Alternate):

- **Bend:** Cassie Lacy / Chris Ogren (*new as alternate, former at-large*)
- **Redmond:** John Nielsen (*new appointment*)
- **Sisters:** Jackson Dumach / Paul Bertagna (*continuing*)
- **La Pine:** Brent Bybee (*new appointment*)

## Franchise Haulers:

- **Cascade Disposal:** Erwin Swetnam / Michael Grove (*new alternate*)
- **Republic Services:** Erica Haitsma / Courtney Voss (*new alternate*)

## Citizen Members:

- **Technical:** Timm Schimke (*new appointment, replacing Jared Black*)
- **Financial:** Luke Dynes (*continuing*)
- **At-Large:** Keith Kessar & Robin Vora (*continuing*)
- **The Environmental Center:** Neil Baunsgard (*new appointment, replacing Mike Riley*)



# Project Team Members

## Deschutes County

- **Tim Brownell** – Solid Waste Department Director
- **Jeff Merwin** – Solid Waste Infrastructure & Compliance Manager
- **Sue Monette** – Management Analyst
- **Angie Heffner** – Administrative Support
- **Stephanie Marshall** – County Legal Counsel
- **Kristie Bollinger** – County Property Manager

## Parametrix (Consultant):

- **Dwight Miller, PE** - Project Principal
- **Ryan Rudnick, PE** - Project Manager



# SWAC Role

## **Solicitation for committee members, issued February 2022:**

*Deschutes County is seeking applicants for its Solid Waste Advisory Committee. Committee members will provide input on the screening and selection process for the location of a new landfill in Deschutes County.*

*The County has been working on the development of site screening criteria for this effort. The committee will participate in the evaluation of candidate sites and other aspects of landfill siting effort. Ultimately, the Committee will make a recommendation to the Board of County Commissioners on a candidate site.*



# Public Comments

3 minutes per person, tentatively, depending on the number of people wishing to comment

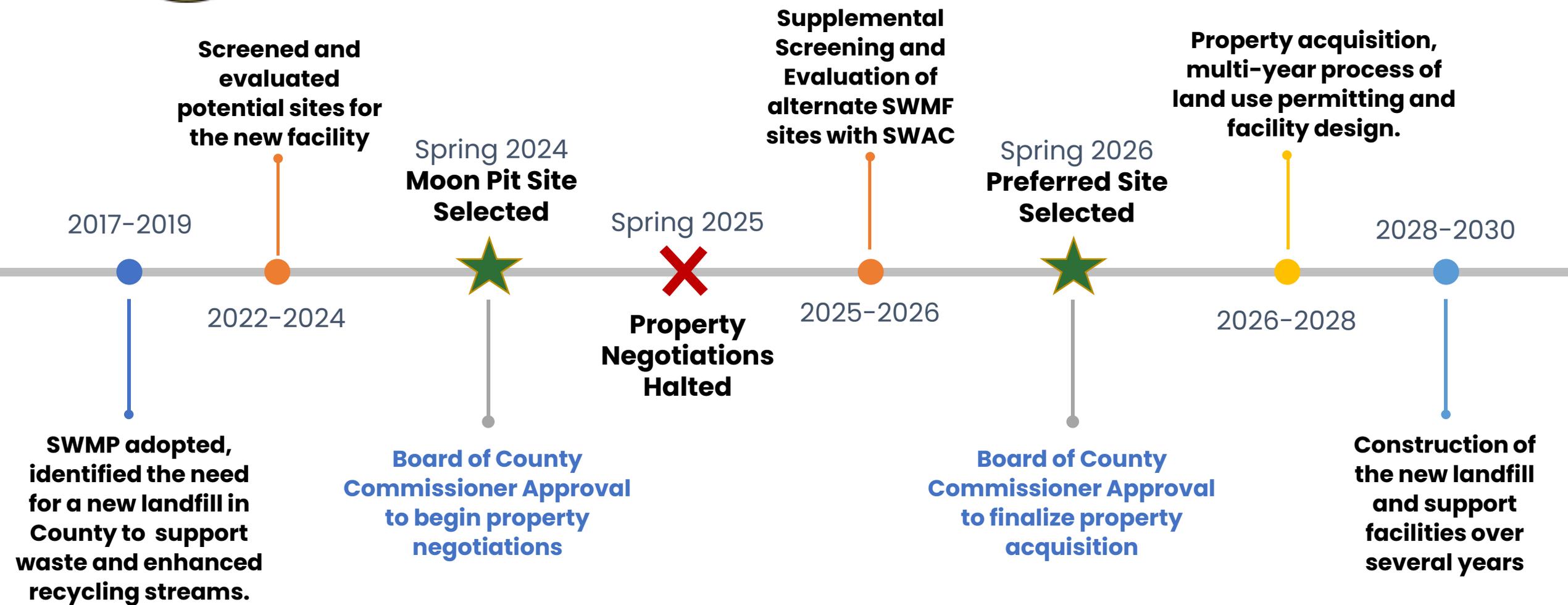
Written comments can also be sent to:  
[managethefuture@deschutescounty.gov](mailto:managethefuture@deschutescounty.gov)



# Overview of Landfill Siting Background, Process, and Recommendations

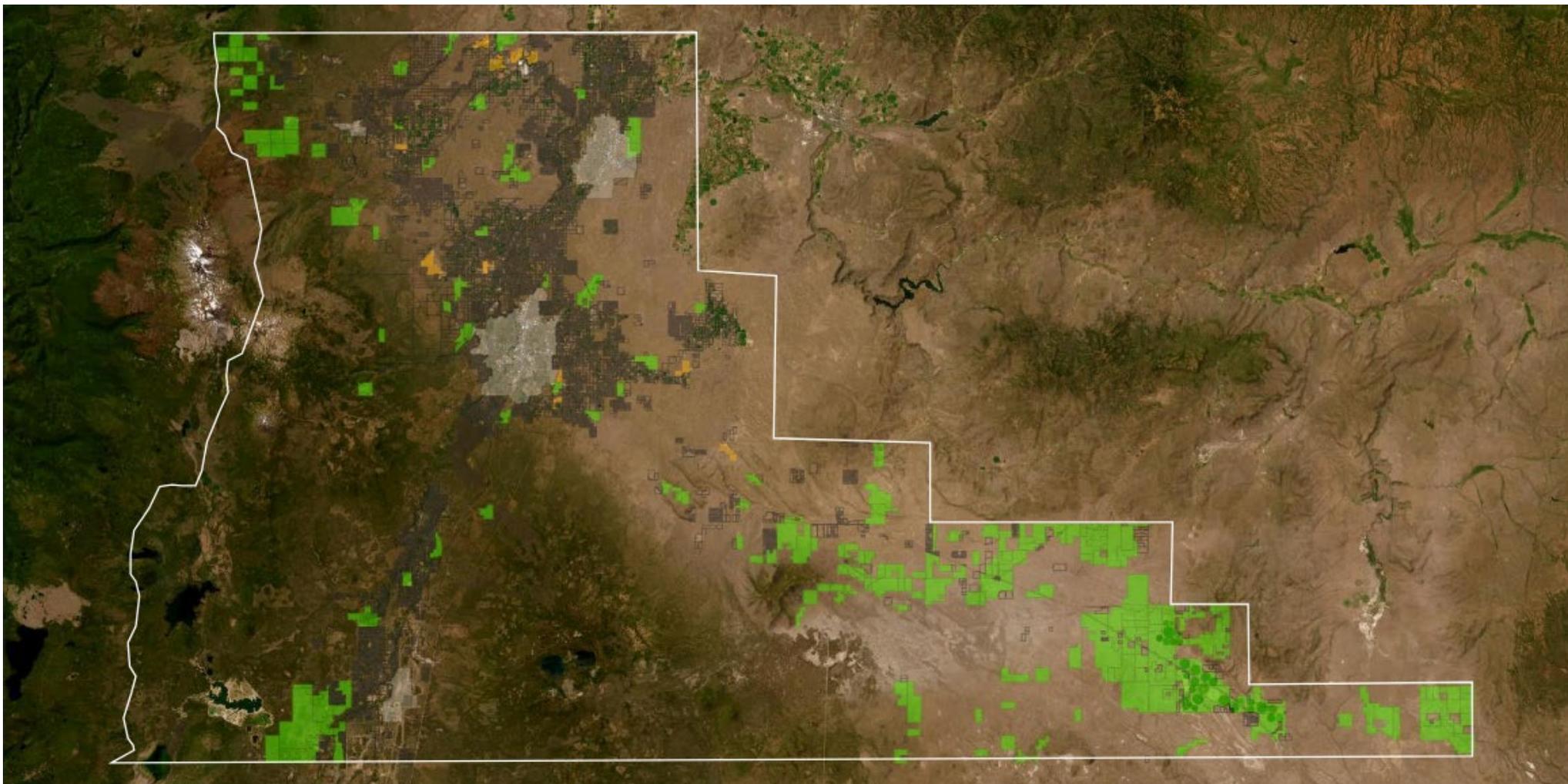


# Roadmap to Opening in 2031



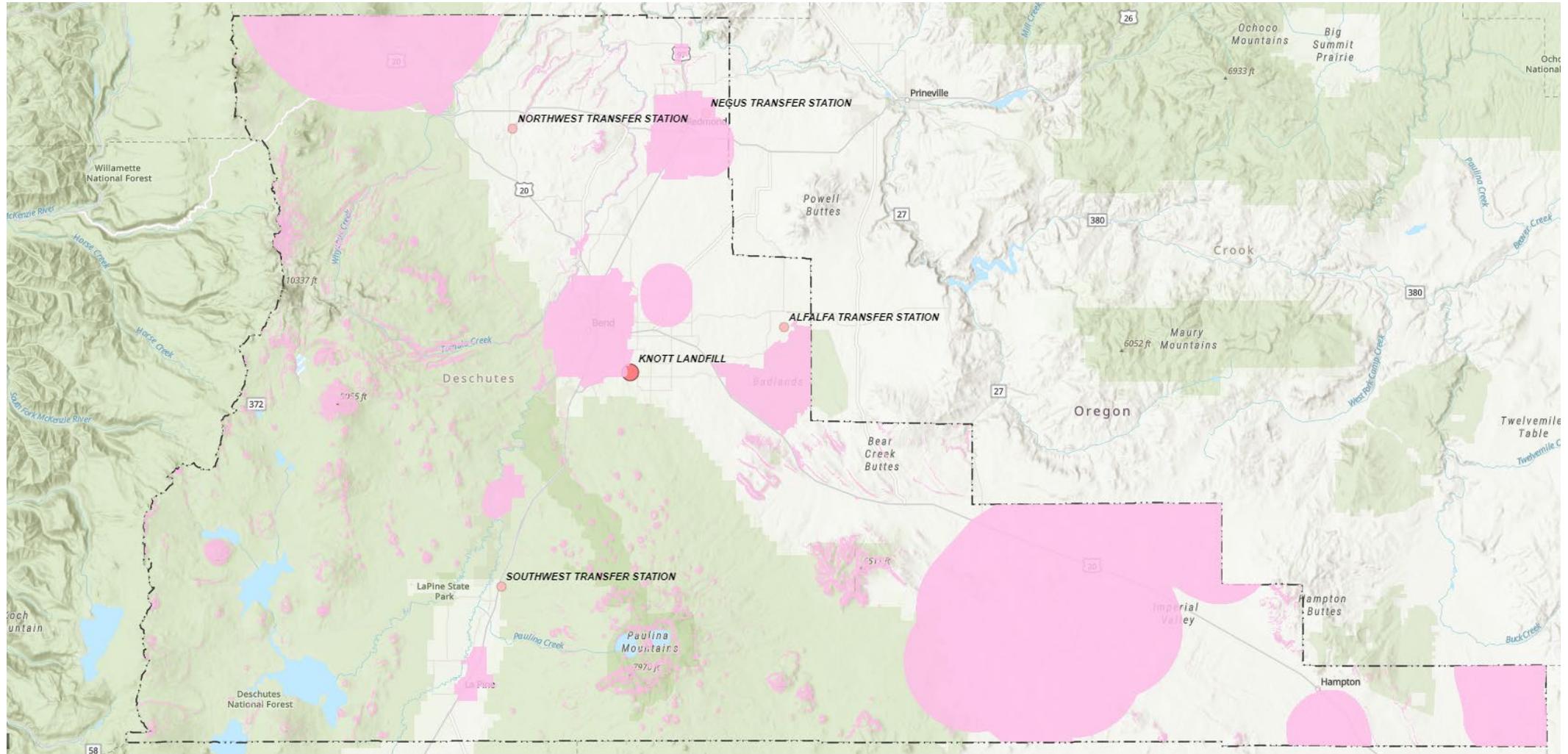


# Initial Areas Identified by County



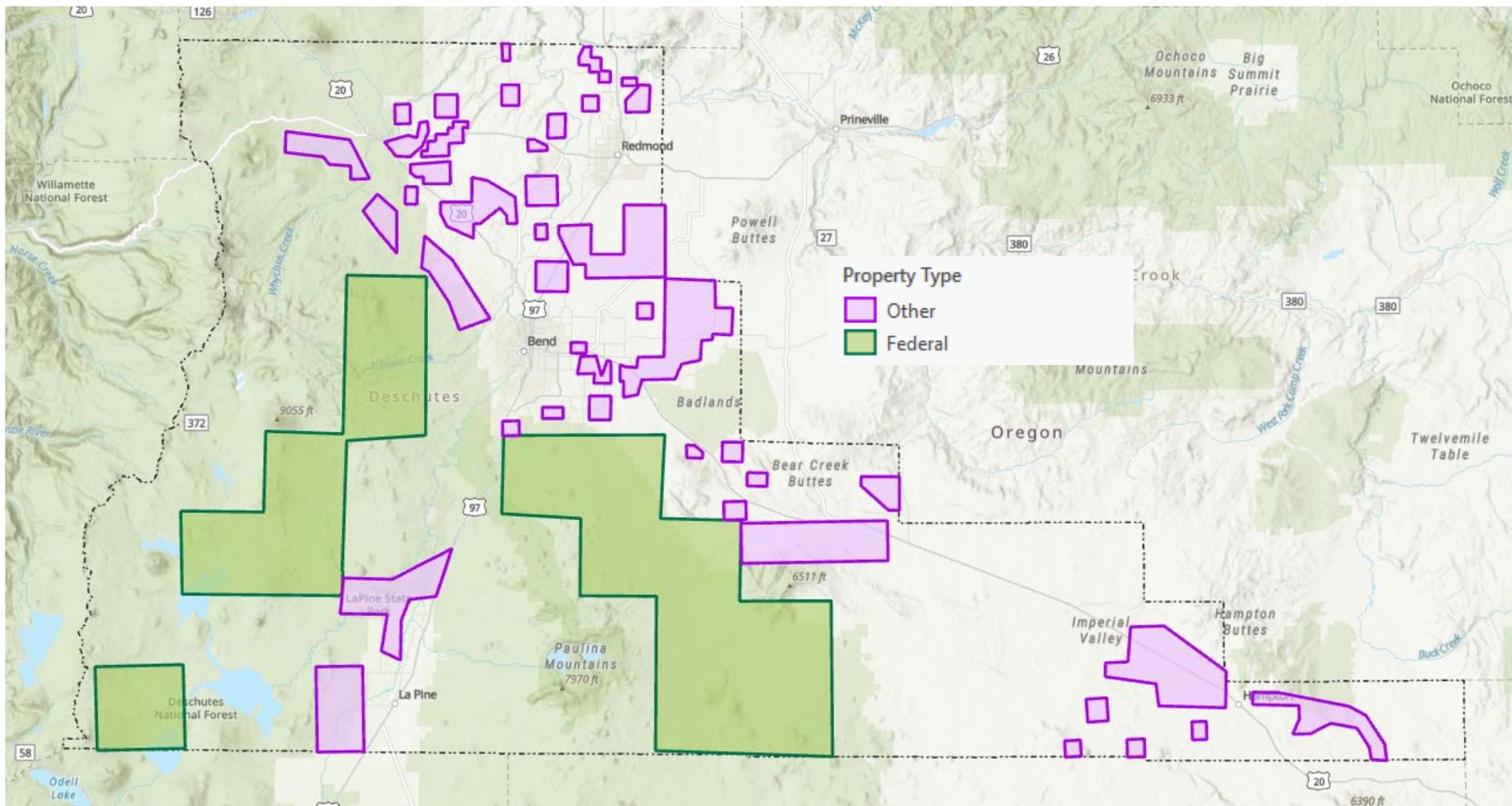


# Exclusionary Area Mapping





# Broad-Site Screening Areas of Interest



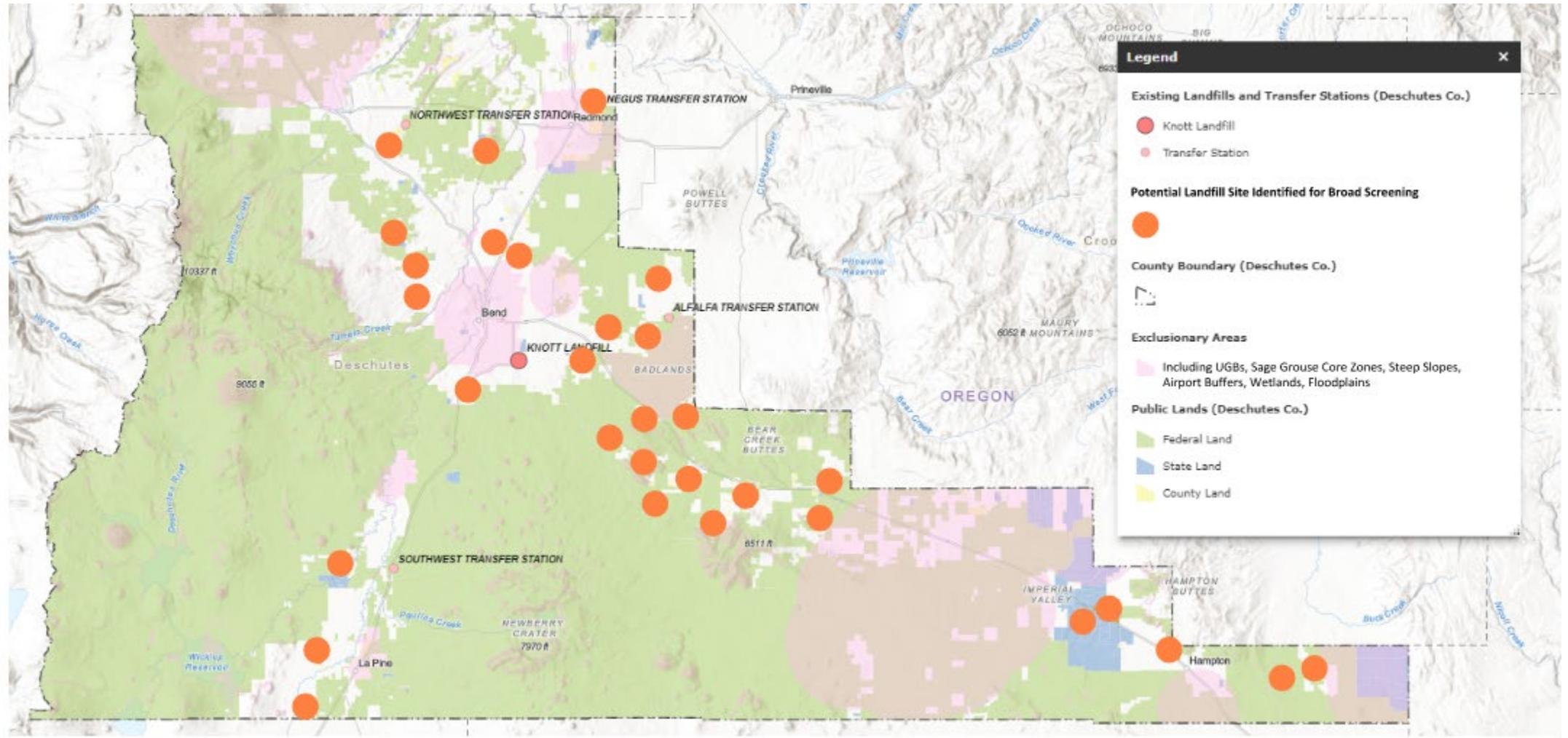


# Broad Site Screening Process

1. Identify potential sites, consisting of parcels and parcel assemblies (5 or less) that are outside exclusionary areas and 300-3,000 acres
2. Develop preliminary disposal area footprints based on buffers and topography, outside exclusionary areas
3. Analyze parcel-level information available via GIS resources
4. Score sites according to broad site screening criteria
5. Eliminate sites that have fatal and practical flaws



# Broad Screen Sites Identified





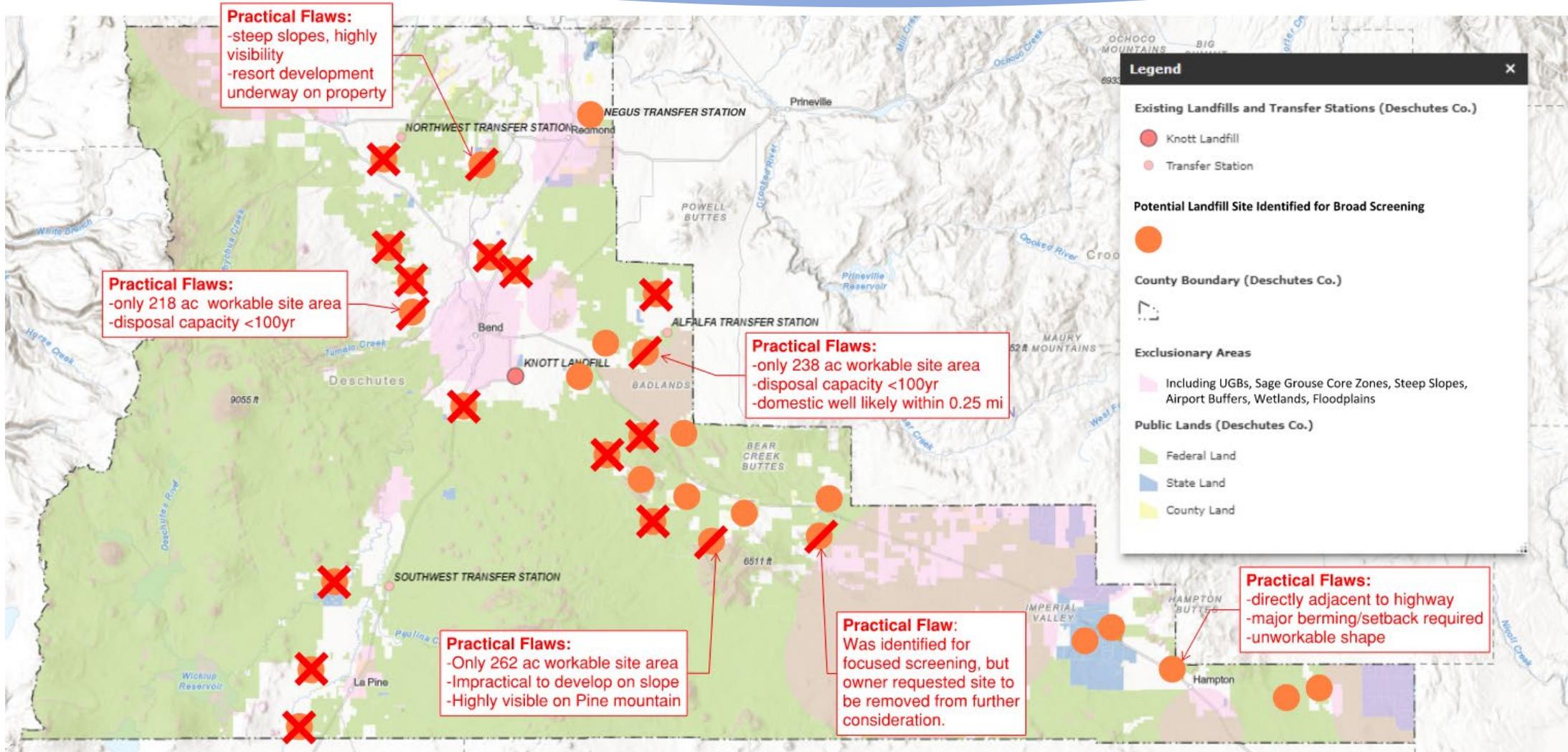
# Broad Site Screening Process

Criteria and weight	Weight	Total Score:	Notes
<b>Site Characteristics/Engineering</b>			
	35%	3.08	
Site Availability/Acquisition Potential	35%	4.60	
Ownership	40%	5	Deschutes County
Number of Parcels	20%	5	Single Owner
Total Site Acreage	40%	4	499 acres
Geotechnical Location Factors	10%	1.20	
Fault Hazards	25%	1	1.0 mile SE of site boundary
Seismic Impact Zones/Hazards	30%	0	Moderate liquefaction/
Unstable Areas – Mass Movement	25%	3	moderate landslide hazard
Unstable Areas – Poor Foundation	20%	1	no data
Floodplains	5%	5.00	
Groundwater Protection/Hydrogeology	20%	2.75	
Depth to Groundwater	25%	5	avg SWL of 5 adjacent wells -546 ft
Proximity to Drinking Water Wells	30%	0	4 dom. wells <0.25 mi. on adjacent properties
Proximity to Wellhead Protection Areas	15%	0	50% of site in Boonesborough 2Y TOT
Site Hydrogeologic Framework	30%	5	DESC 4736 & 55079; confined
Development	15%	1.00	
Soils	45%	1	grey basalt predominant
Topography	30%	1	Avg Slope < 1.0 percent
Capacity/Site Configuration	25%	1	Disposal Area Footprint = 124 acres
Operation	15%	2.65	
Haul Distance to Waste Centroid	60%	3	
Annual Precipitation	15%	4	
Onsite Water Supply and Management	25%	1	no water right in property boundary; cert 46254 1 well dom located just north of property.
<b>Natural Environments</b>			
	35%	5.00	
Wetlands and Waters Impacts	10%	5.00	A Canal runs adjacent to the site
Threatened and Endangered Species	20%	5.00	No ESA species identified
Wildlife Area Combining Zone	10%	5.00	No WA zone within 3 miles of site
Greater Sage-Grouse Area Combining Zone	40%	5.00	No GSG zones within 3.1 miles of site
Sensitive Bird and Mammal Habitat Combining Zone and Migratory Birds	20%	5.00	
Sensitive Bird and Mammal Habitat Combining Zone	50%	5	No SBMH zone within 0.5 mile of site
Migratory Birds, including Bald and Golden Eagles	50%	5	No bald or golden eagle nest within 2 miles of site
<b>Land Use</b>			
	30%	2.00	
Proximity to Airports	15%	3.00	~3.4 miles to Bend Airport Runway
Site Zoning	20%	1.00	EFU Prime Farmland
Adjacent Land Use Impacts	20%	1.00	
Existing Adjacent Use	25%	1	Residential
Planned Adjacent Use	25%	1	Residential
Distance to Nearest Residence	25%	1	10+ residences within 0.25 mile of site
Distance to Nearest Public Road	25%	1	Hwy 97 within 0.25 mi
Site Visibility/Aesthetic Impact	10%	1.00	
Visibility Based on Topography and/or Vegetation	50%	1	visible from adjacent residences and Hwy 97
Remoteness	50%	1	over 50 residences within 0.5 mile of site
Transportation System Needs/Opportunity	5%	3.00	
Haul Route Impacts	5%	5.00	
On-Site Land Use Impacts	25%	2.60	
Displacement	40%	2	Canal on site
Known Cultural Resources	30%	1	Partial prior survey; 3 unevaluated resources, 2 not eligible
Potential for Buried Archaeological Sites	30%	5	flat land, limited natural water sources; limited probability for significant sites

Broad Screening Site ID	Site Characteristics/Engineering 35%	Natural Environment 35%	Land Use 30%	Total Site Score:
151100	2.88	4.60	2.55	FATAL FLAW(S)
151200	3.44	4.80	2.50	3.63
151300	3.50	5.00	1.90	3.55
161100	2.92	3.20	2.93	FATAL FLAW(S)
161234	3.08	5.00	2.00	FATAL FLAW(S)
171100-2700	3.36	4.60	2.95	FATAL FLAW(S)
171100-2735	3.41	4.60	2.03	3.41
171203	3.14	4.80	3.40	FATAL FLAW(S)
171415	3.24	4.80	3.48	FATAL FLAW(S)
181230	3.40	4.60	2.60	FATAL FLAW(S)
181300	3.94	4.80	2.58	3.83
181315	3.64	4.80	2.88	3.82
181400	3.34	4.80	2.75	3.67
191300	3.03	2.10	3.40	FATAL FLAW(S)
191400-200	3.79	2.80	4.10	3.54
191400-700	3.21	2.10	2.98	FATAL FLAW(S)
191400-2400	3.84	2.60	3.40	3.27
191400-3300	3.31	2.60	2.93	2.95
191600	3.69	3.00	3.88	3.50
201400	3.18	2.10	3.43	FATAL FLAW(S)
201500-300	3.65	3.00	3.23	3.29
201500-1601	2.99	2.80	2.83	2.87
201600	3.04	3.00	3.78	3.25
211000	2.04	3.40	2.73	FATAL FLAW(S)
211900	3.64	3.00	3.43	3.35
212000	3.74	3.20	2.75	3.25
221000-1001	2.72	3.80	3.20	FATAL FLAW(S)
221000-2401	2.77	3.80	2.28	FATAL FLAW(S)
222000	3.73	3.40	2.93	3.37
222200-200	3.75	3.00	3.78	3.50
222200-400	3.73	2.60	3.63	3.30



# Broad Screen Sites Removed due to Fatal or Practical Flaws



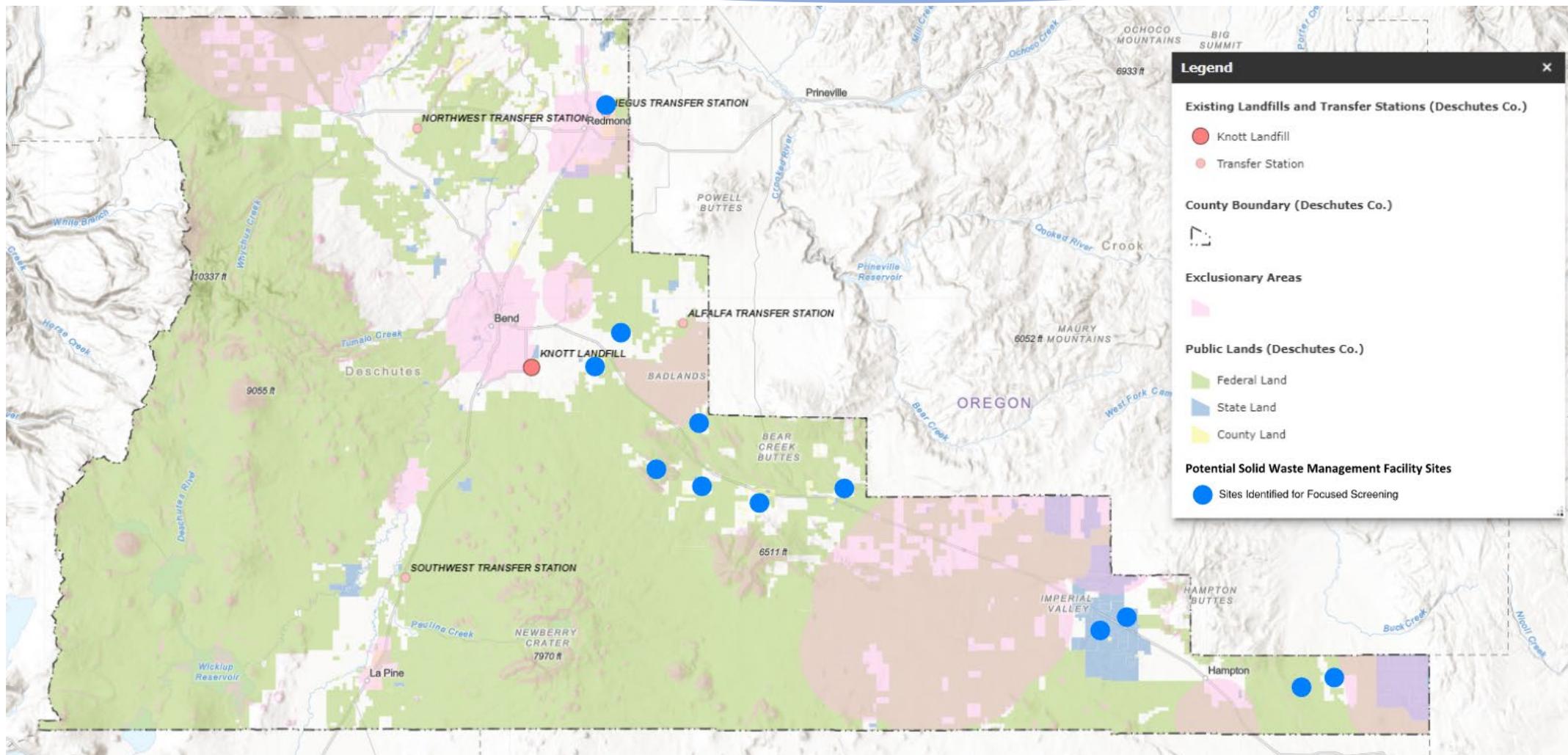


# Focused Site Screening Process

1. Advance sites from broad site screening without fatal or practical flaws.
2. Conduct outreach to site property owners to verify acquisition potential
3. Score sites according to focused site screening criteria
4. Compare sites in terms of the number of residential dwellings within 1-mile and 2-miles
5. Compare sites in terms of comparative cost factors



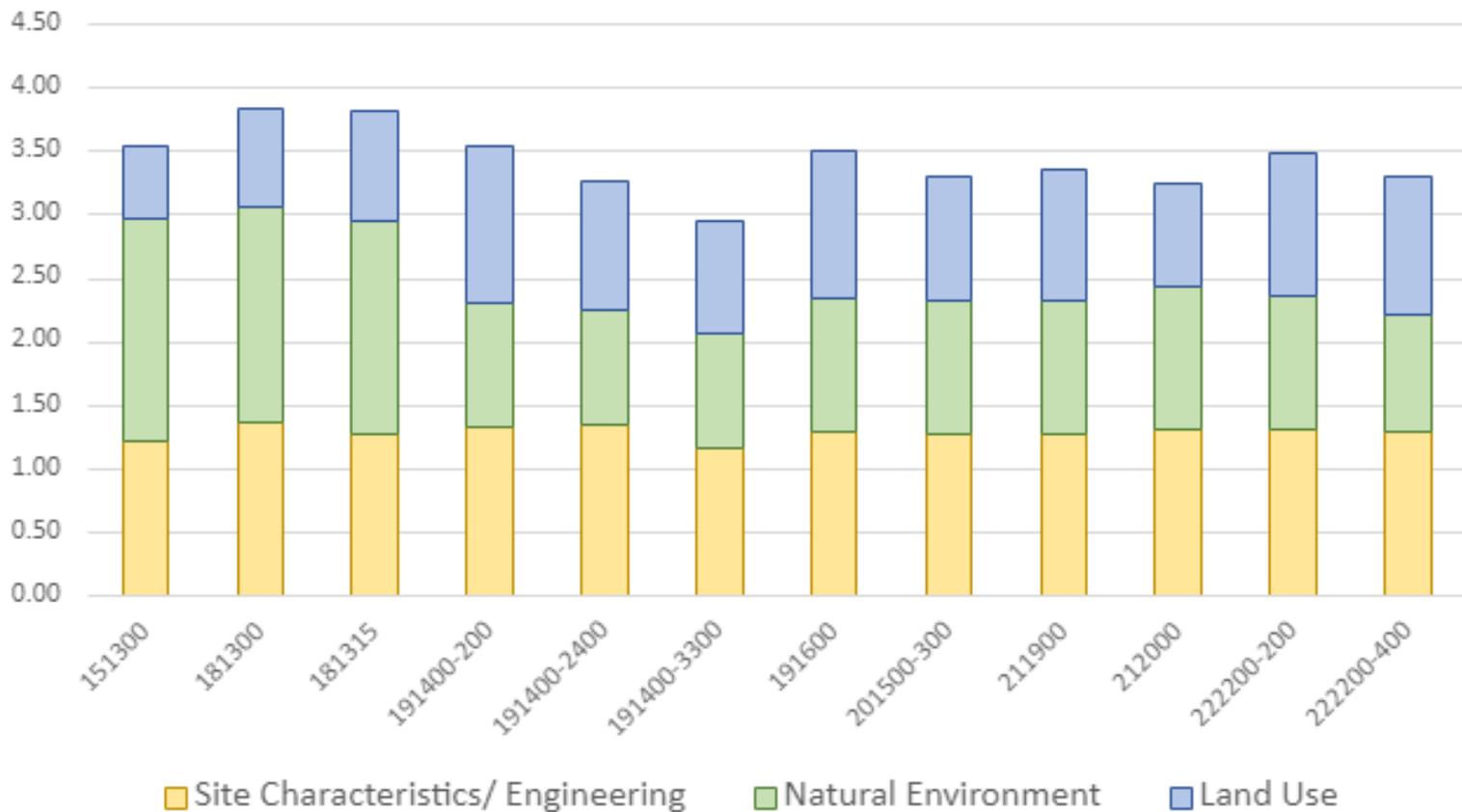
# Sites Identified for Focused Screening





# Sites Identified for Focused Screening

### Broad Site Scoring Comparison

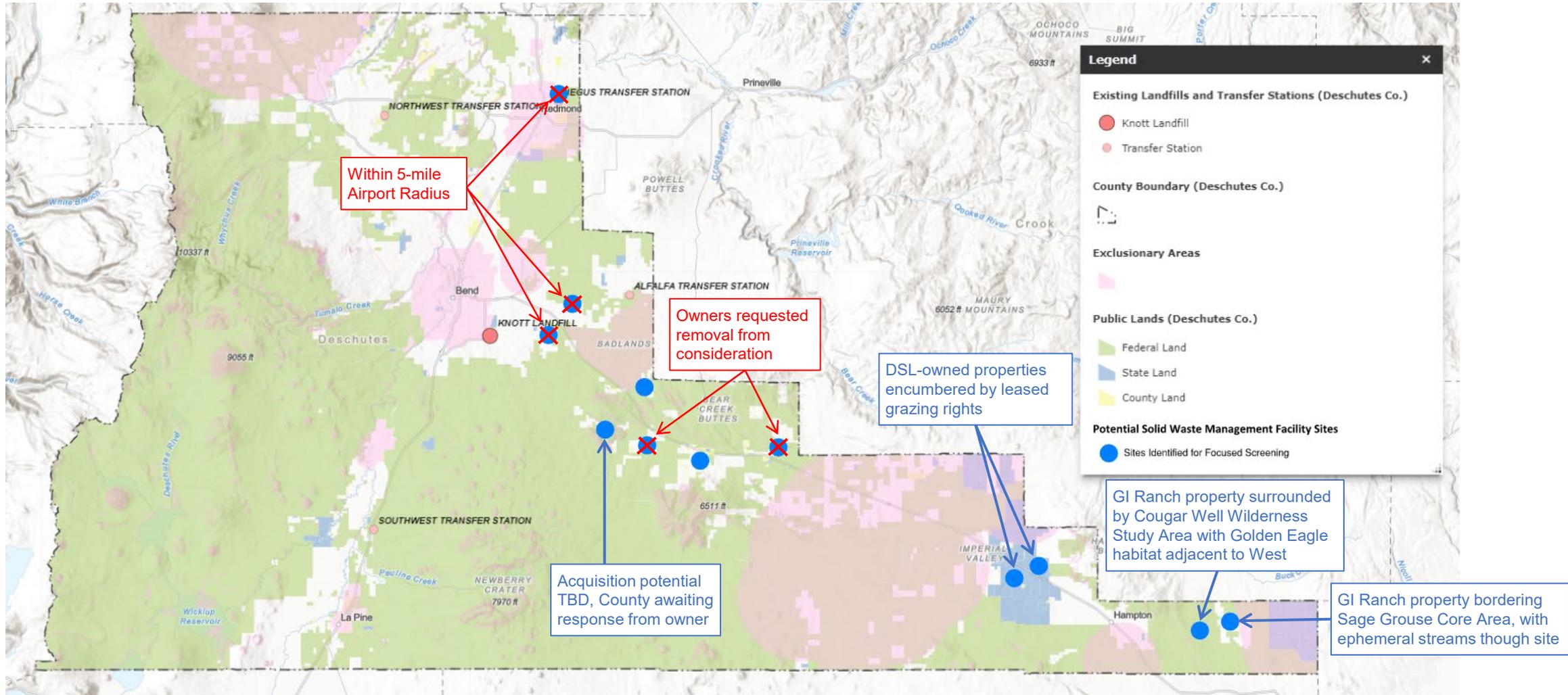


General comparison of how sites performed against criteria and in each main category for Broad Site Screening

Existing and new source data was further analyzed to refine scoring in Focused Site Screening



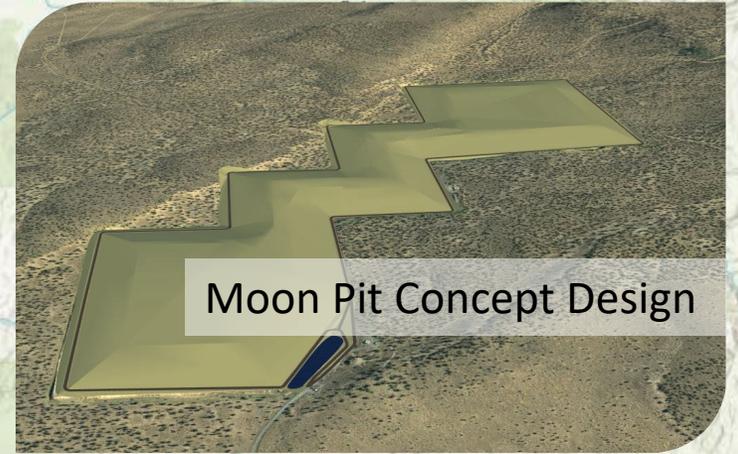
# Focused Screening Updates



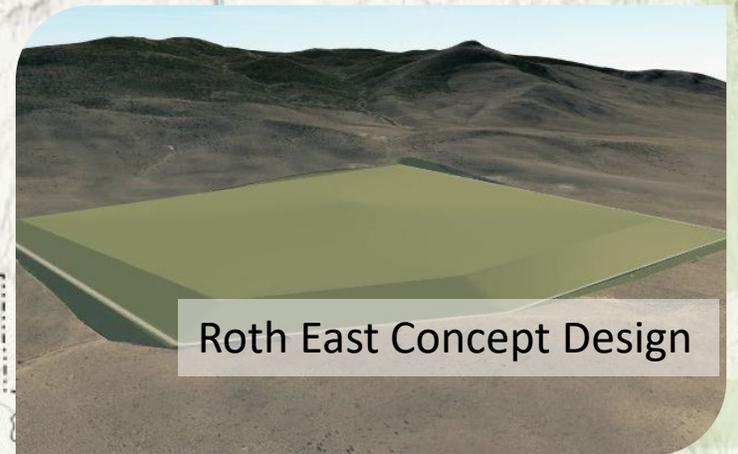


# Finalist Sites

## Moon Pit and Roth East



Moon Pit Concept Design



Roth East Concept Design



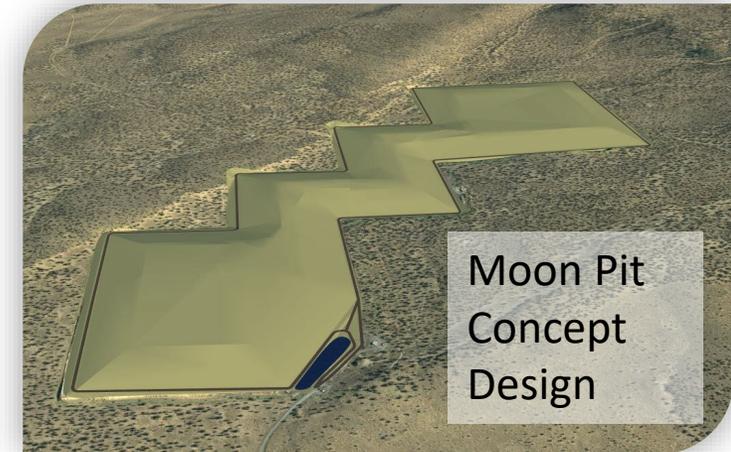
# SWAC Final Site Recommendation & BOCC Selection: Moon Pit

**On April 16, 2024, the SWAC unanimously recommended the Moon Pit site for the new County Solid Waste Management Facility (SWMF).**

Key reasons for this recommendation included:

- The site is currently being used as an aggregate surface mine and is already disturbed
- Based on the current use, new impacts to area wildlife or recreation are would be less
- The site is comparatively closer to existing facilities which will help manage haul costs

**On July 10, 2024 the Deschutes County Board of County Commissioners (BOCC) voted to select “Moon Pit” as the preferred location for the County’s next landfill and authorized County staff to move forward with the **property negotiations and due diligence.****





# Moon Pit Property Negotiation Update



# Moon Pit Property Negotiation Update

Agreement could not be reached between the County and the seller regarding:

- Property closing timeline
- Public entity requirement for property appraisal
- Uncertainty about how the cost of water rights would be determined



**March 19, 2025**  
**BOCC Meeting & Direction**



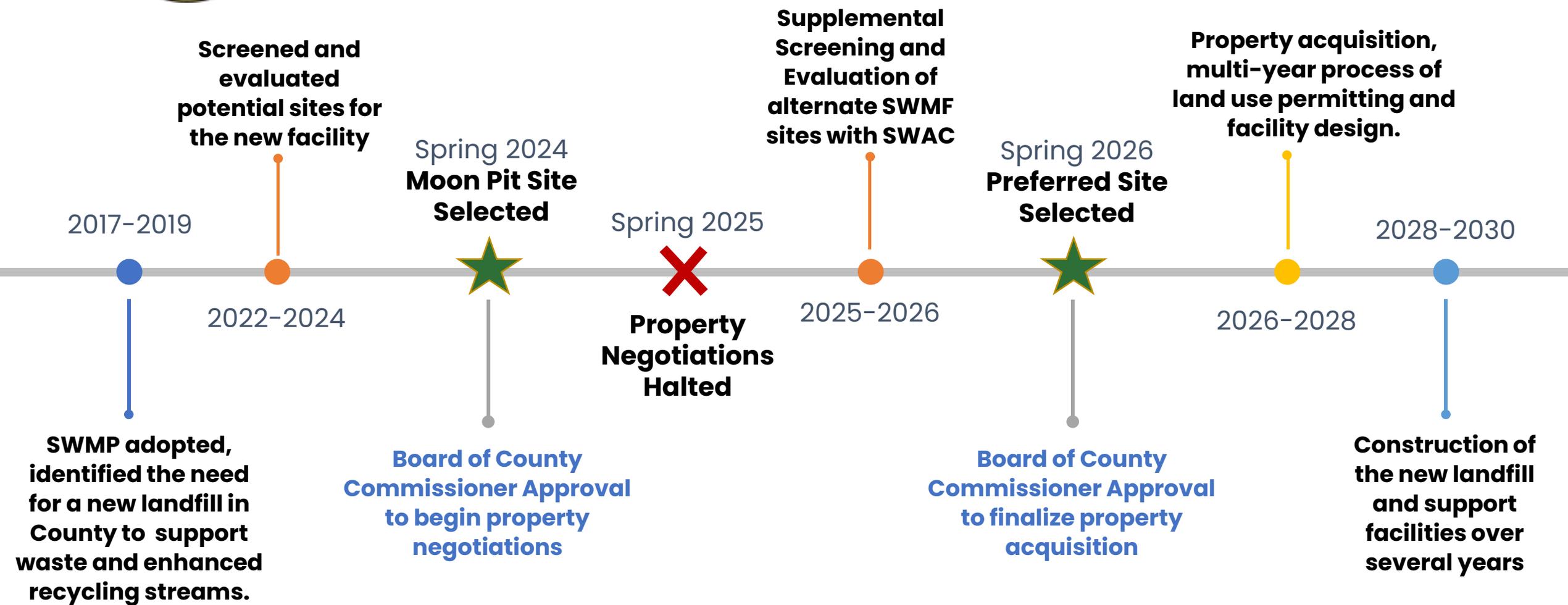
# March 19, 2025 BOCC Meeting & Direction

- DCSW updated commissioners regarding status of Moon pit negotiations
- Presented various options for future solid waste disposal, including out-of-county landfill transfers
- An updated JRMA study examined alternate disposal technologies (i.e. waste to energy incinerator, plasma gasification, etc.) which were found to be technically and economically unviable for the County at this time.
- Options were presented to Commissioners for county MSW disposal:
  1. Reconvene SWAC to consider:
    - a. Recommend Roth East
    - b. Screen & Evaluate additional alternate sites
  2. Transfer to out-of-county landfills

**BOCC gave direction to re-convene the SWAC for further review, deliberation, and recommendation.**



# Roadmap to Opening in 2031





# Alternate SWMF Sites



# What has changed?

Slower-than-expected waste growth trends in the county over recent years have **extended Knott Landfill's solid waste disposal capacity to approximately 2031.**

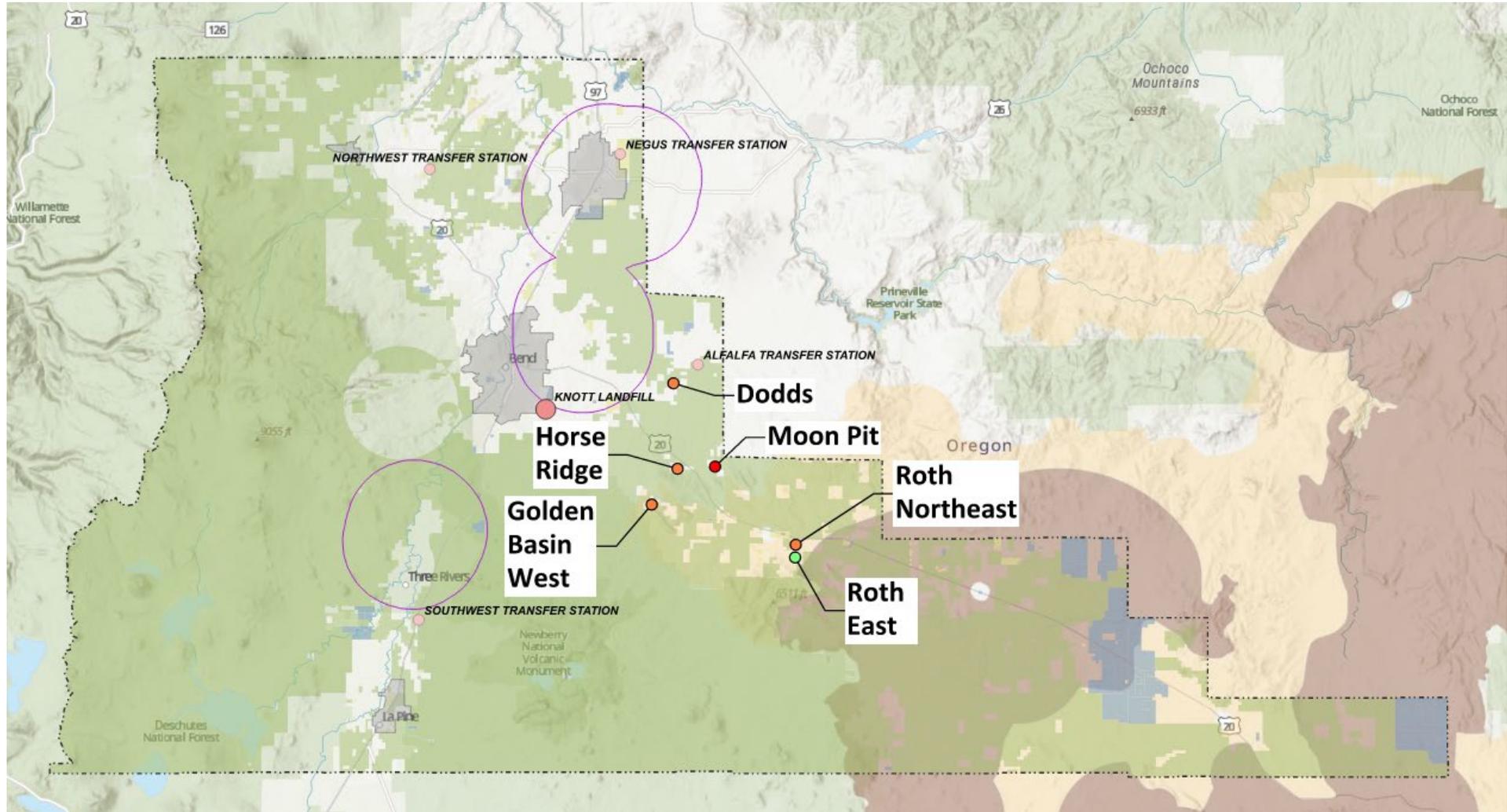
This provides some additional time for supplemental site screening, property acquisition, permitting, and landfill construction. Yet, **urgency remains for alternate site selection.**

Several factors relevant to SWMF Siting have been updated and some sites previously screened out have become more feasible. For example:

- Updated **Sage Grouse Habitat Maps** adopted in 2025 change the mitigation requirements for some sites.
- New **golden eagle nest location data** from USFWS provides more precise habitat impact assessments, than the section-level habitat mapping available during broad site screening.
- Increased **willingness** from some property owners to **sell** land.
- The County Solid Waste staff are open to considering **smaller disposal areas** (<250 acres) that can facilitate at least 80 years of disposal capacity.

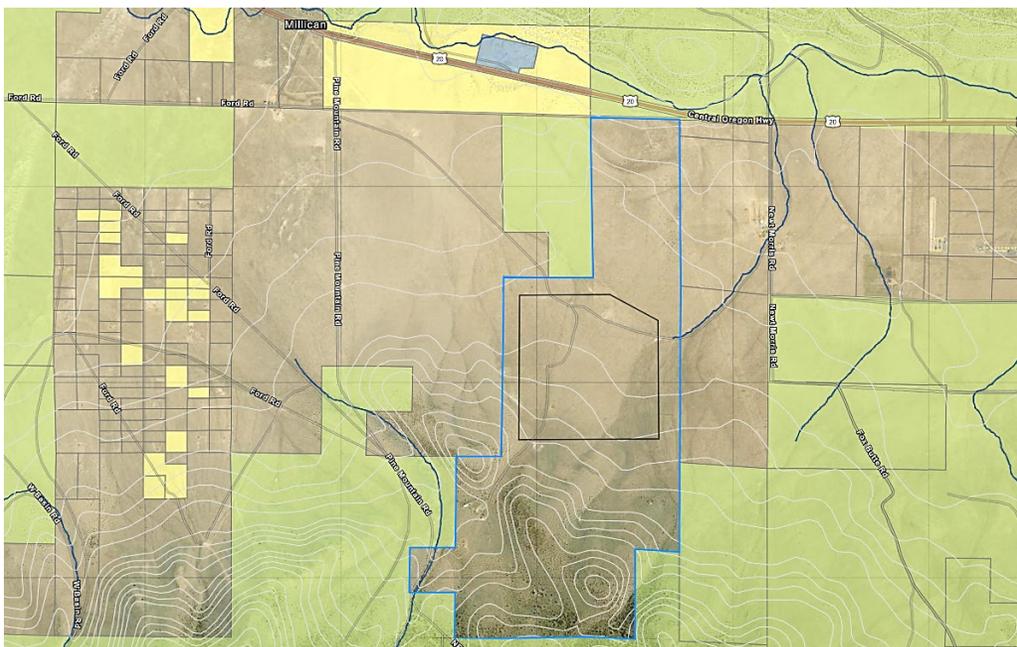
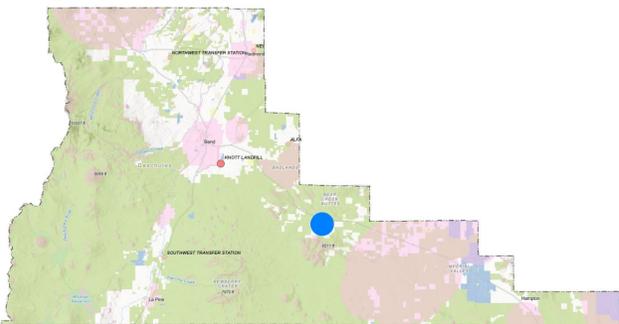


# Alternate SWMF Sites





# Roth East



## Considerations:

- Finalist SWMF site evaluated to same level as Moon Pit site. Further study not required for selection.
- Near southeast extent of Millican Valley / Basin
- Within Low Density Sage Grouse Habitat Area
- Core Sage Grouse Zone ~0.5 mile SE from disposal area
- Variety of recreational uses in broad vicinity
- Nearest residence ~0.7 mile distant
- Setback 1 mile from Pine Mountain road and Highway 20, and screened from view by topography
- 23-27 miles from waste centroid
- All Roth properties recently offered for sale ~3,000 acres.
- Cost-effective to excavate and operate due to ~300 ft depth of alluvial sediment deposit.



# Roth East Site Photos



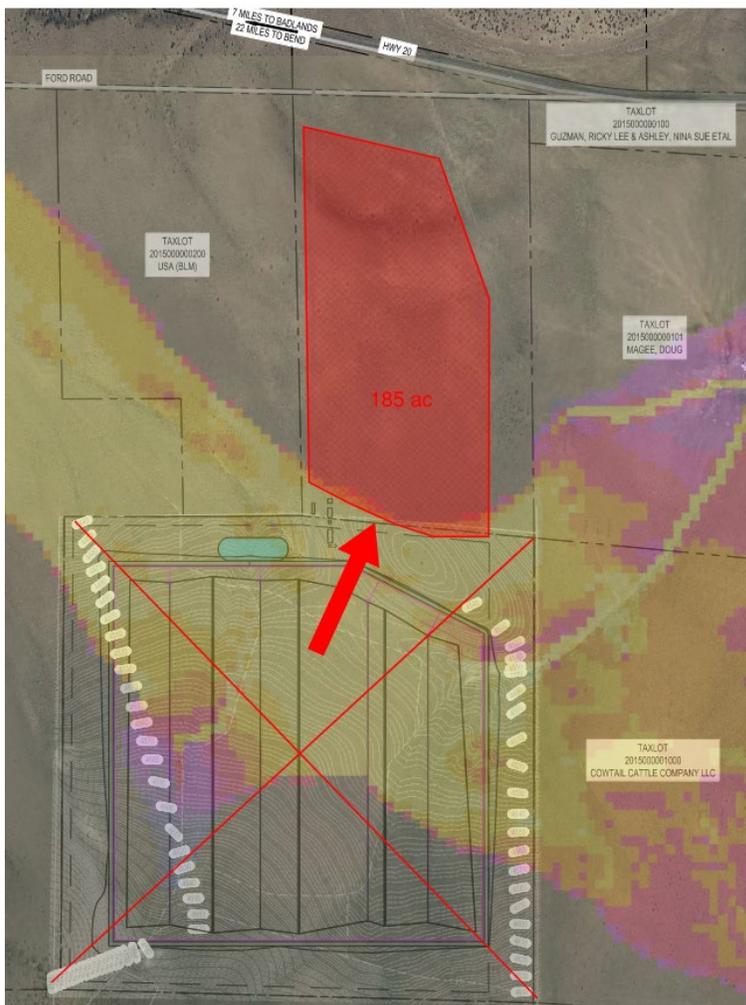
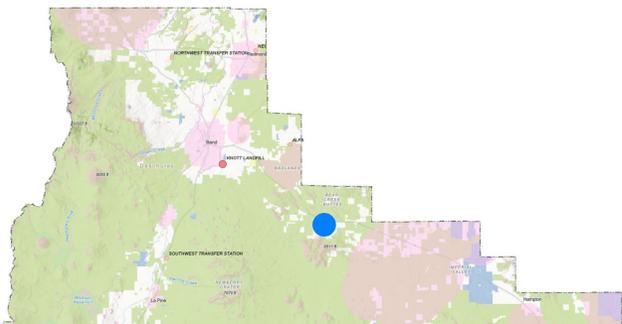


# Roth East Site Photos





# Roth Northeast



## Considerations:

- Alternate disposal area north of Roth East site on same taxlot, to avoid mapped Sage Grouse Migration route.
- NE site is setback 1 mile from Pine Mountain road and screened by topography from Millican area views
- Visible from Highway 20 to north, setback ¼ mile
- Transmission lines through NE corner of site
- ~185 acre disposal area, estimated to have closer to 80 years of disposal capacity
- 25 miles from waste centroid
- Nearest residence ~0.5 mile distant
- Within Low Density Sage Grouse Habitat Area
- Core Sage Grouse Zone ~0.8 mile SE from disposal area
- Shorter access road needed, compared to Roth East
- All Roth properties recently offered for sale ~3,000 acres.
- Nearby well logs suggest 100'+ depth of sand, gravel, clay, and cobble deposits – cost effective excavation and operations anticipated – but further investigation needed to confirm.



# Roth Northeast Site Photos





# Roth Northeast Site Photos



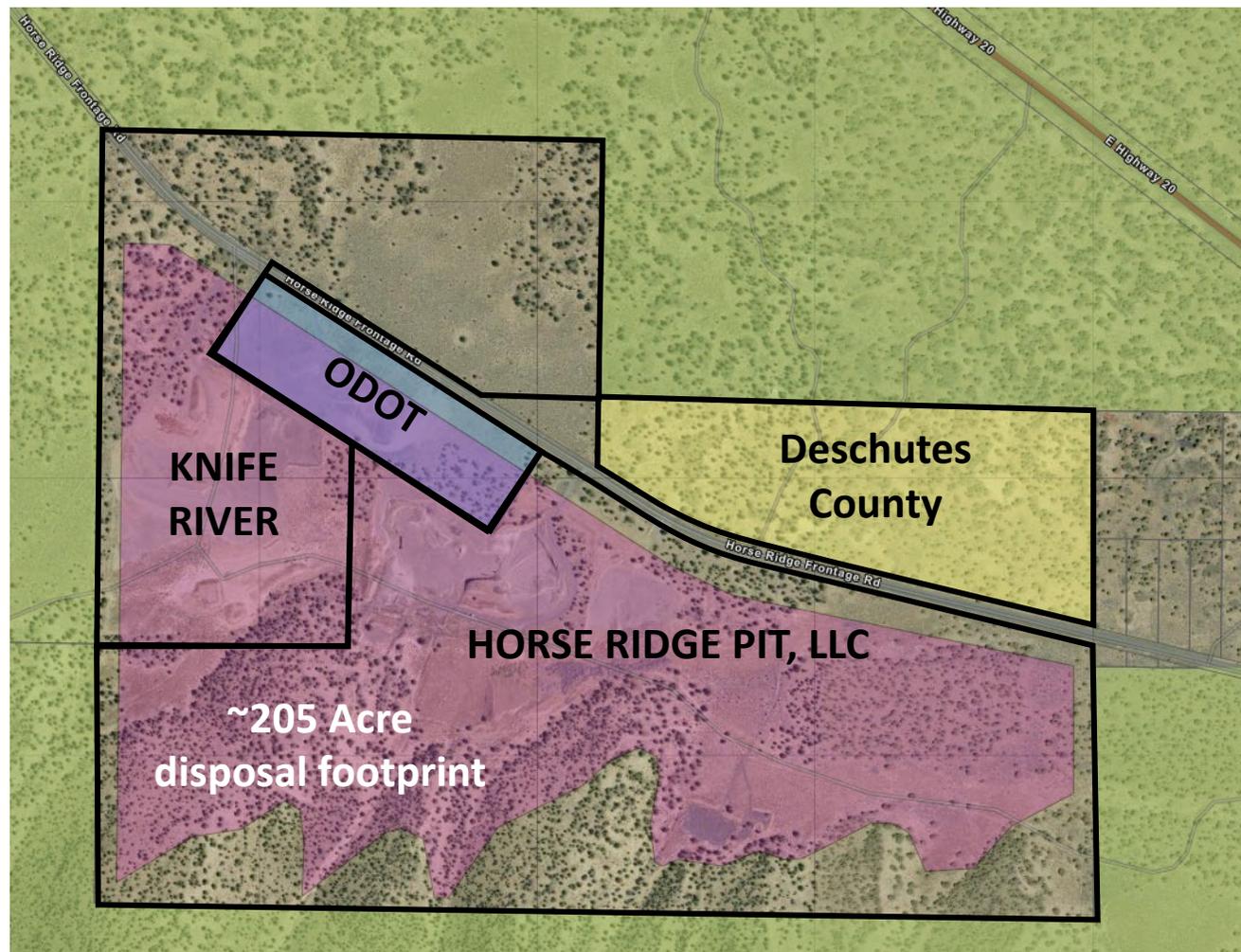


# Horse Ridge



## Considerations:

- 3 property acquisitions required from separate owners
- Combined property area is approximately 391 acres
- 13 miles from waste centroid
- Access to the site from Hwy 20 & Horse Ridge Frontage Road
- No residences within 0.25 mile, approx. 3 dwellings within 1 mile
- Road re-alignment or code variance may be required to address the ¼ mile road setback requirement per County Code
- Two existing wells onsite, but no water rights
- Central band of sedimentary deposits (sand, gravel) up to 30' deep, with basalt rock to north and south.
- 80-100 year disposal capacity est., depending on footprint & depth
- ~7 mile extension of 3-phase power needed from Dodds Rd
- Projectile point, lithic scatter, and can dumps found onsite during 1996 cultural resources reconnaissance survey
- Golden Eagle nest mapped ~1.5 miles to the Southwest





# Horse Ridge Site Photos



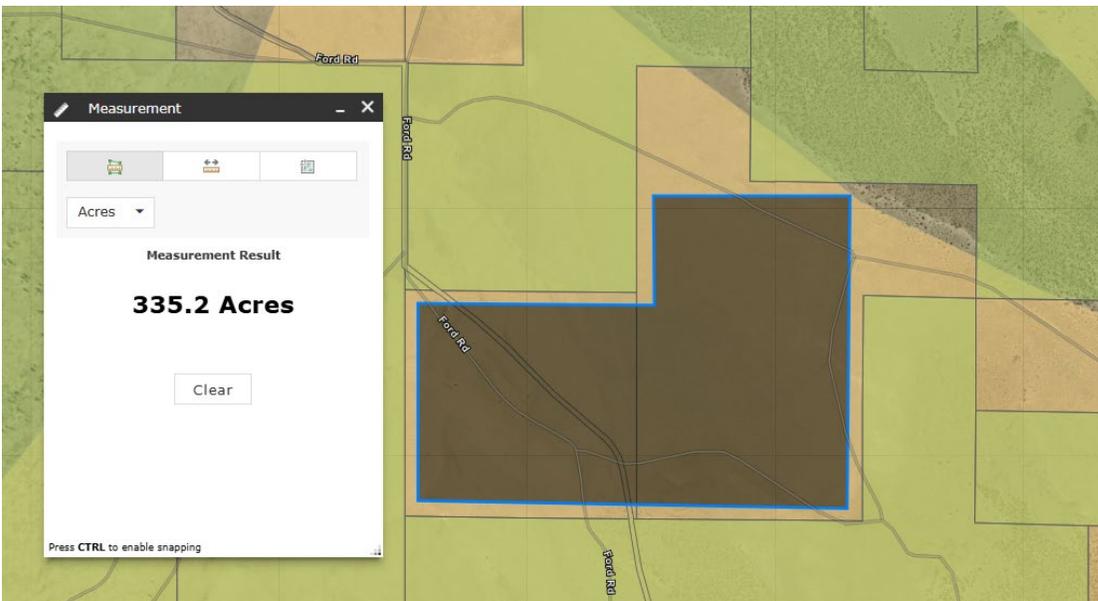
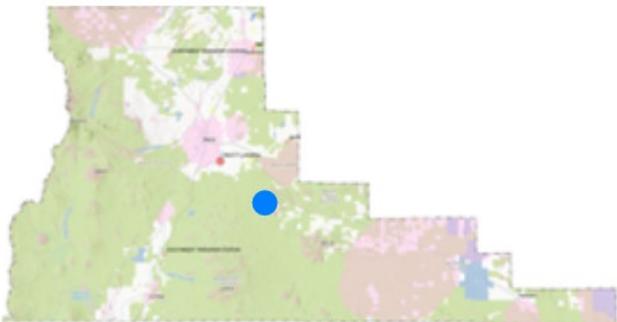


# Horse Ridge Site Photos





# Golden Basin West

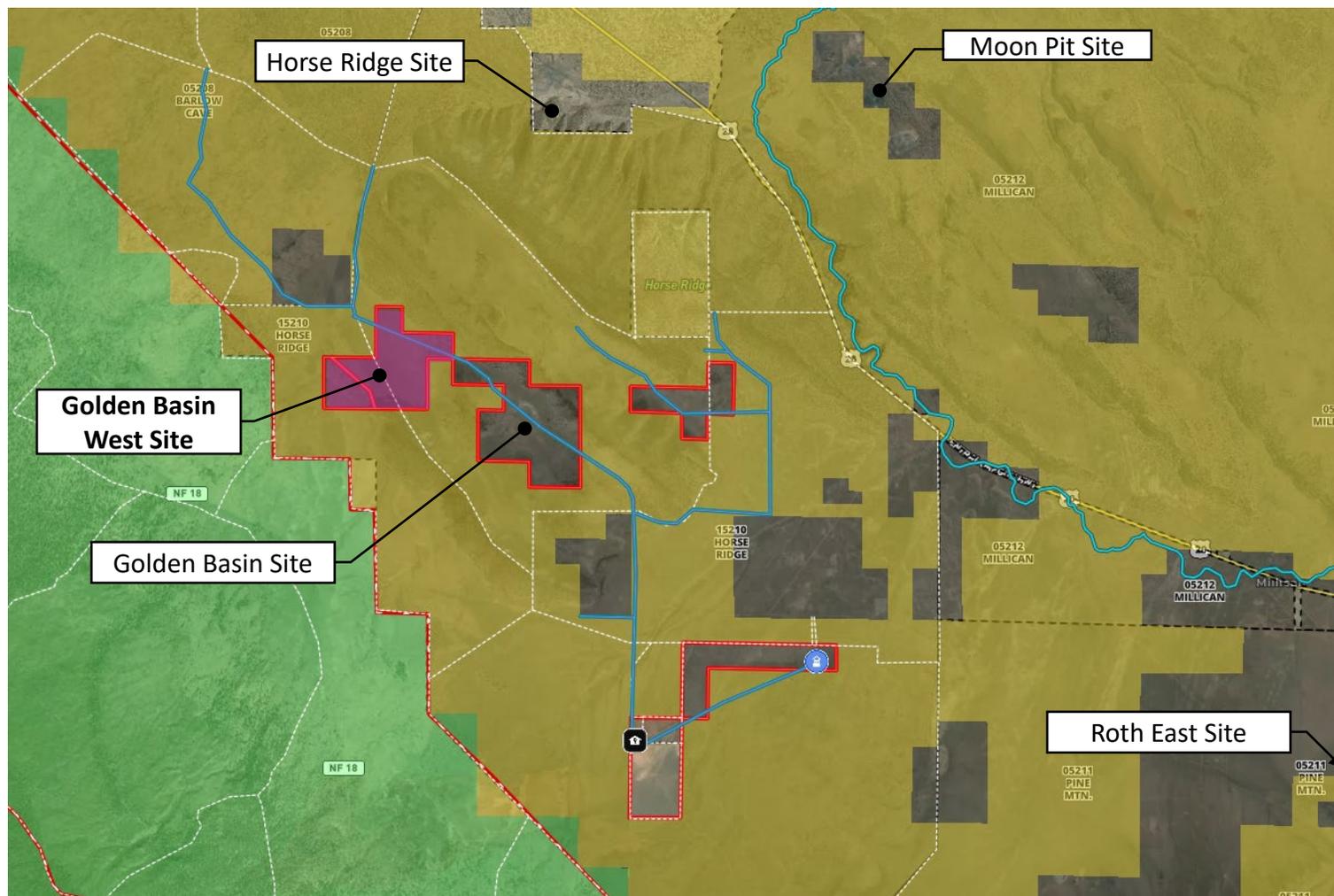


## Considerations:

- On two parcels west of Golden Basin site, which was reviewed in Focus Screening and eliminated due to unwillingness to sell at the time
- 'Golden Basin Ranch' was recently listed for \$4.5M with 1,998 deeded acres, including these two deeded parcels.
- De-listed currently, awaiting response from Owner
- No residences within 3 miles
- VERY Remote and well hidden from most nearby viewpoints
- Surrounded by BLM land, but accessible via 60' wide Ford Rd ROW
- Would require road reconstruction along Ford Rd (~7 miles) from end of Gosney & Arnold Market Rd (haul route impacts) or Stookey Rd (~5 miles) – BLM coordination and NEPA compliance may be required.
- Golden Eagle and Big-eared bat nest points within ~1.5 mile radius
- Within Low Density Sage Grouse Habitat Area
- No nearby water or power infrastructure
- 13 miles from Waste Centroid
- NRCS soil report classifies site as sandy loam. Landforms suggest alluvial or windblown deposits between ridges, but depth is unknown.



# Golden Basin Ranch Listing Map

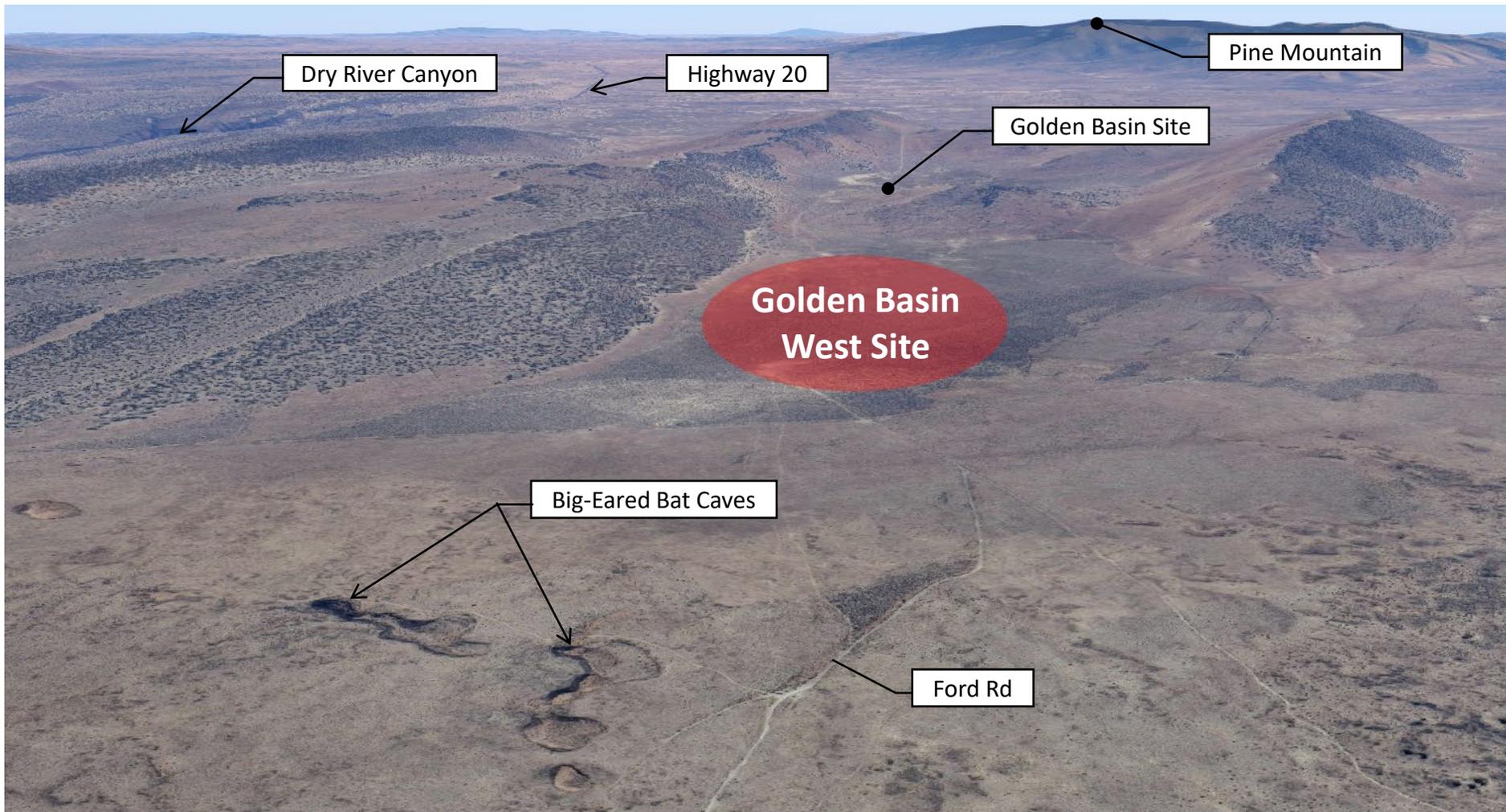


## Quick Facts

- Total Acres: 83,341.05 +/-
- 46,843 +/- USFS-Cinder Cone Allotment-600+/- AUM's
- 22,152 +/- BLM- Horse Ridge Allotment- 1,624 +/- AUM's
- 12,348 +/- BLM Barlow Cave Allotment- 600+/-AUM's
- 1,998.05 +/- Deeded Acres
- Less than 25 Minutes from Bend, Oregon
- Main House- 4 bedrooms 2 bath-Well/Septic 200Amp Service (2 leks mapped onsite)
- Bunk House- Studio office area with 1- bath
- 2019 New Well

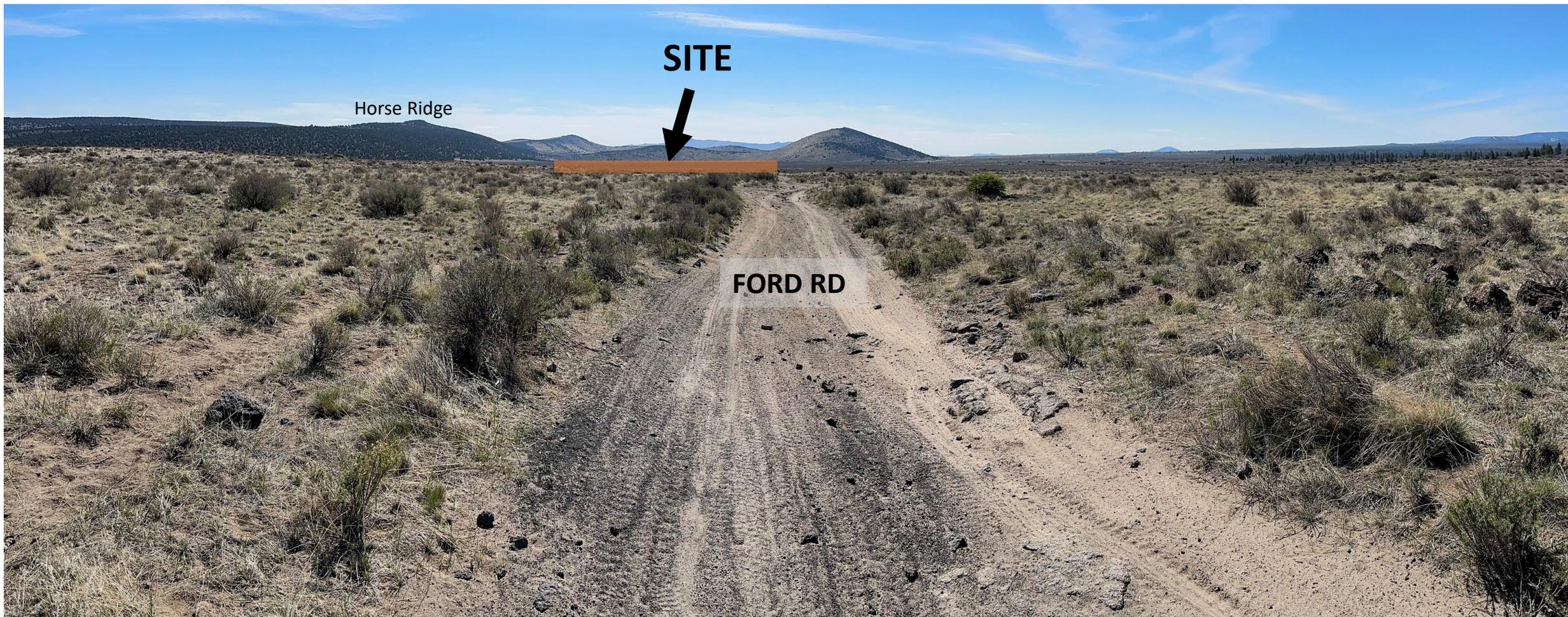


# Golden Basin West Vicinity



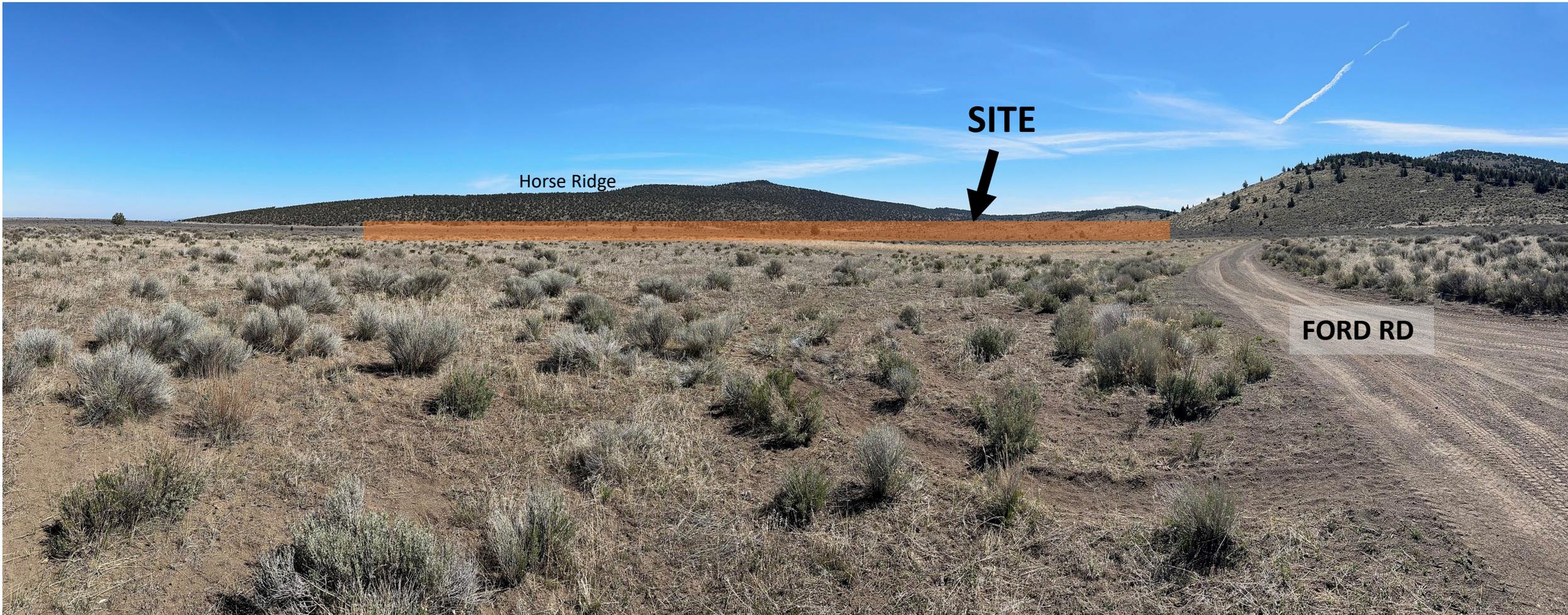


# Golden Basin West Photos



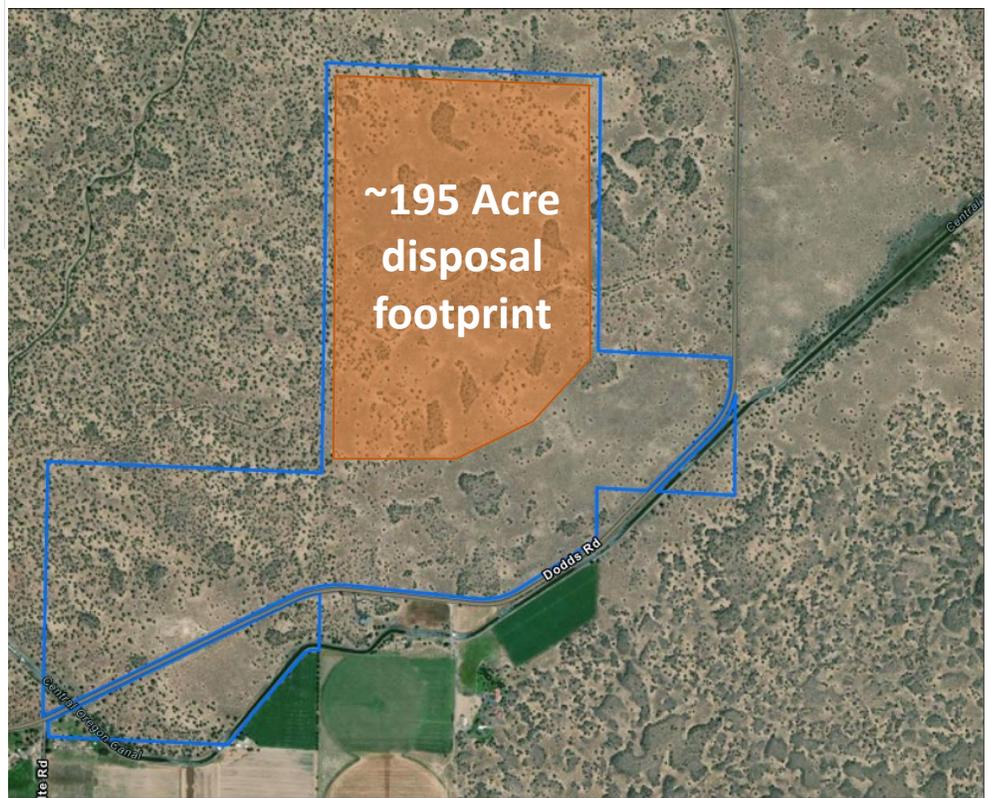
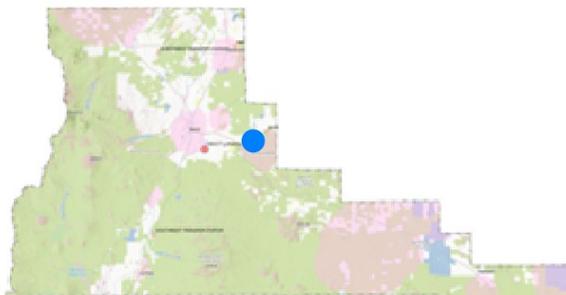


# Golden Basin West Photos





# Dodds Road Site



Potential Sites

Site_ID	Site Nickname	Tot. Dev. Acreage	TAXLOT	Parcel Acreage	OWNER
181400	COID Dodds	479	1814000000300	478.91	CENTRAL OREGON IRRIGATION DISTRICT

## Considerations:

- 480 acre property Owned by Central Oregon Irrigation District (COID)
- Acquisition potential TBD
- 14 miles from waste centroid, access via Hwy 20 and Dodds Road
- Approximate 80-yr capacity anticipated
- Shallow basalt bedrock anticipated, based on nearby well logs and visible rock formations
- Existing wells and residences nearby, approx.:
  - 3 within 0.5 mile
  - ~25 within 1 mile
  - ~60 within 2 miles
- Adjacent to farms, ranches, and Badlands Wilderness Area (to the East)
- No known wells or water rights onsite
- 3-phase power near SW corner of site at intersection of Dodds & Obernolte
- Undulating terrain, gently sloped down north



# Dodds Road Site Photos





# SWAC Recommendation on Path Forward



# SWAC Recommendation on Path Forward

## Potential recommendations before the SWAC:

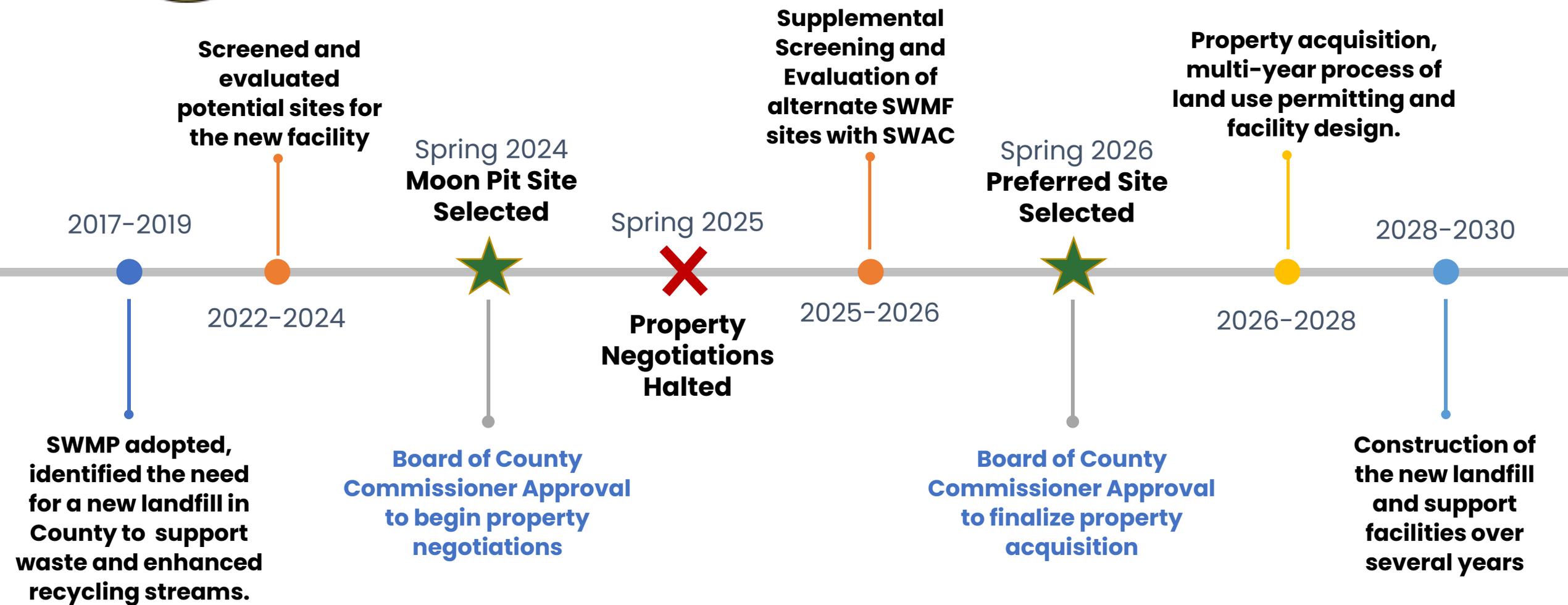
- 1. County pursue acquisition of Roth East for the landfill**
  - Likely continuing with Phase 3 Site Permitting & Design in 2025 Q3.
- 2. Screen and evaluate alternate sites for comparison, along with Roth East.**
  - Assuming 1 additional alternate site is recommended for final site evaluation (as with Moon Pit & Roth East), Phase 3 Site Permitting & Design would likely resume 2026 Q2.
- 3. Other?**



# Next Steps



# Roadmap to Opening in 2031





# What happens next...

## Continuation of SWAC Meetings in 2025 for supplemental site screening and recommendation of alternate SWMF site:

- June 17, 2025, 9-11 am: preliminary findings update (focus screening)
- July 15, 2025, 9-11 am: review input on finalist sites, confirm site evaluations
- August 19, 2025, 9-11 am: finalist site(s) recommendation

## Ways to stay up to date:

- Visit: [deschutes.org/managethefuture](https://deschutes.org/managethefuture)
- Email: [managethefuture@deschutescounty.gov](mailto:managethefuture@deschutescounty.gov)



**Deschutes  
County:  
Managing  
the Future of  
Solid Waste**

Informational Story Map

Deschutes County Department of Solid Waste | August 2024

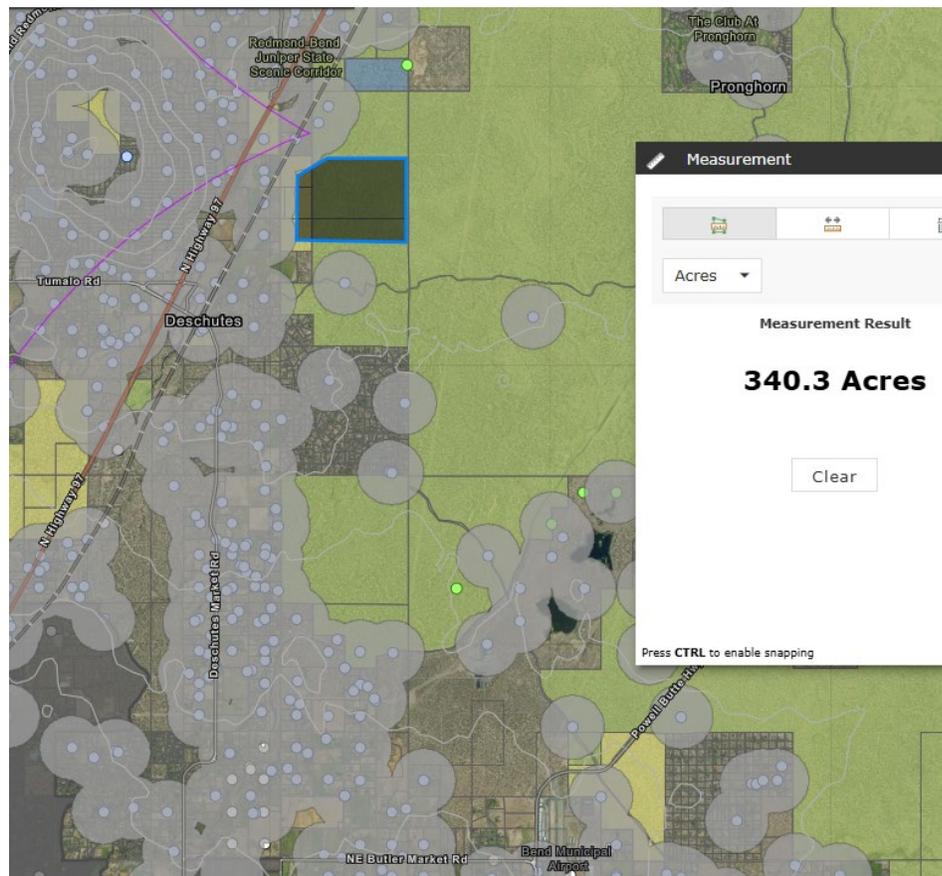
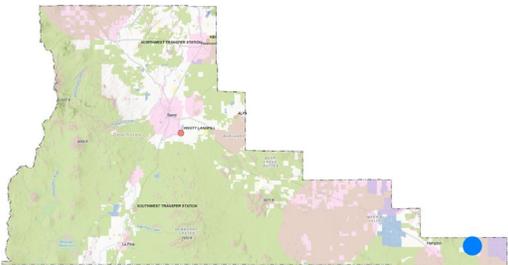


# Adjourn





# Hwy 97 County/BLM Site



## Cons:

- During the site screening process, the SWAC and BOCC officially moved to consider the 5-mile radius around public airports to be an exclusionary zone for landfill siting, consistent with FAA recommendations.
- Expensive and difficult to operate due to shallow and persistent bedrock.
- Lengthy process for BLM land acquisition.
- BNSF railway crossing required
- Substantial opposition from nearby property owners

## Pros:

- Centrally located between Bend and Redmond
- Outside Sage Grouse habitat zones