



Solid Waste Management Facility Siting Study

Solid Waste Advisory Committee (SWAC) Meeting

August 19, 2025





Agenda

1. Introductions/Welcome 9:00
2. Review/Approve July Meeting Minutes 9:05
3. Property Acquisition Updates 9:10
4. Public Outreach Updates 9:15
5. Additional Site Screening Information 9:20
6. Public Comment 9:45
7. SWAC Discussion, Deliberation, and Decision 10:15
8. Adjourn 11:00



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



Property Acquisition Updates

Horse Ridge Site

- Met with Horse Ridge Pit, LLC owner on 4/17. Second meeting occurred on 7/14. **Discussions ongoing.**
- Met with Hap Taylor & Sons, LLC pit owner (Knife River Corporation) onsite 4/22. **Second meeting on 7/30.**
- Met with ODOT on 7/9 regarding 20-acre aggregate pit – open to selling and will initiate process through ODOT property management department if site is selected for further study.

Dodds Rd Site

On August 12, the Central Oregon Irrigation District Board of Directors voted unanimously to remove the property described as T18S, R14E, tax lot 300 ("Dodds Road Site") from the list of sites under consideration for the siting of the landfill.

Roth Sites

- Motivated seller, offering all Roth property holdings at reduced price. Ready to negotiate.



Public Outreach Updates

- **Neighbor Mailings:** Letters were mailed to private owners of property within a 1-mile radius of the Horse Ridge site.
- **BLM Outreach:** A letter was emailed to the Deschutes Field Office, sharing updates about the challenges with acquiring the Moon Pit site and the alternate sites being reviewed in the Supplemental Site Screening process.
- **Update to Special Interest Groups:** Emails sent to tribal representatives, Central Oregon Trail Alliance, Regional Solutions Team, and the Central Oregon Conservation Network
- **Reviewing public comments and distributing to the SWAC**



Public Outreach Updates

Public Input Overview

Stakeholder Group	Roth East Sentiment	Horse Ridge Sentiment
Conservation Organizations	● Strongly Opposed	● Cautiously Supportive (if no better options exist)
Local Residents	● Strongly Opposed	● Awaiting input
Recreational Users (hang gliders, COTA)	● Opposed (Pine Mountain impact)	● Cautious (bike trails nearby)
Indigenous Groups (CTWS)	● Concerns; cultural review needed	● Awaiting input
ODFW	● Costly mitigation; sage-grouse impact	● Prefer over Roth East
General Public / Other	● Critical of Roth East	● Horse Ridge viewed as "disturbed" site



Public Outreach Updates

Representative Comments

"The Roth East site would threaten wildlife, fragment habitat, degrade recreational opportunities, and involve excessive transportation and infrastructure costs." — Oregon Natural Desert Association & Central Oregon LandWatch

"The estimated sage-grouse mitigation cost for Roth East is over \$7.6 million. This site is directly adjacent to Core habitat."
— ODFW, June 2025 Letter to SWAC

"The Horse Ridge Site is already a disturbed site, currently used for gravel mining... making it a good candidate for a landfill... Please, no landfill on Pine Mountain." — Steve Wright

"If negotiations with Moon Pit cannot be restarted, please consider Horse Ridge. Again, it is already disturbed." — Skye Kimel

"Compared to Roth East, Horse Ridge is preferable from a wildlife mitigation perspective and would likely incur far lower costs."
— ODFW Summary of June 2025 Site Screening

"Horse Ridge trails are popular for winter riding. While we understand landfills must go somewhere, siting here could provoke mountain biker backlash." — Ben Taber, Central Oregon Trail Alliance (COTA)



Additional Site Screening Information

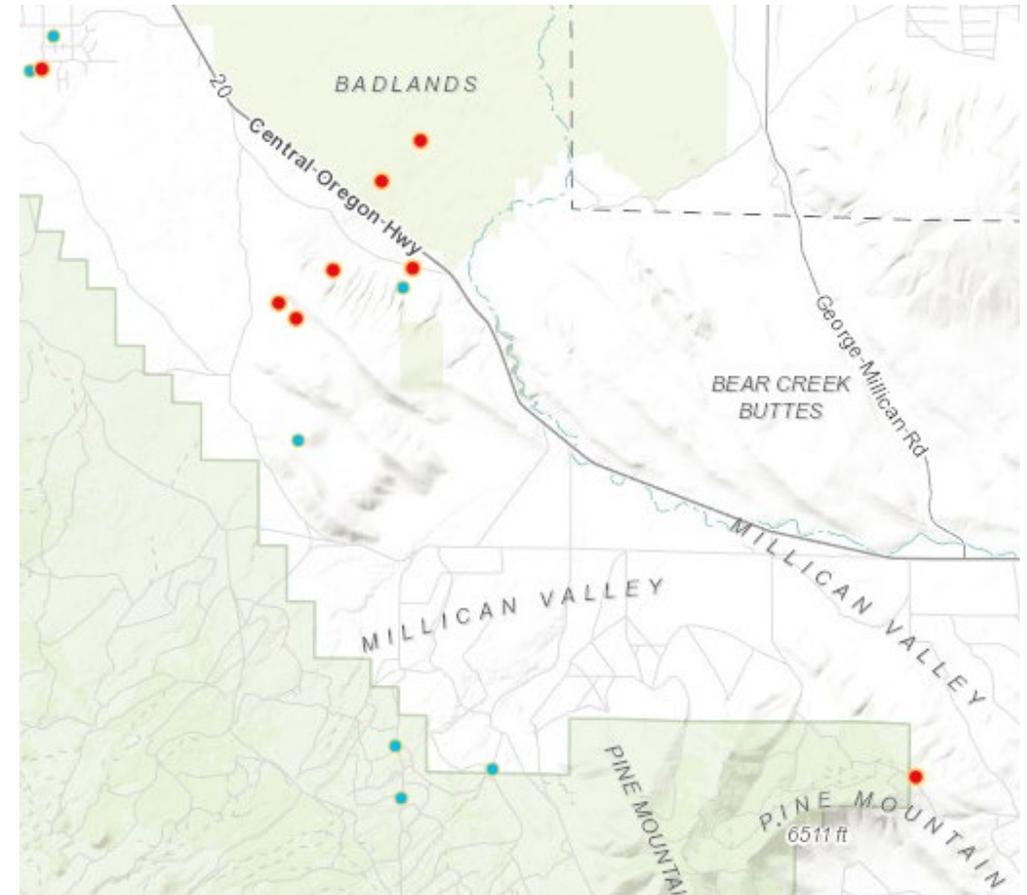


Pinyon Jay Information

Habitat – Pinyon Jays depend on pinyon-juniper and ponderosa pine woodlands for foraging, caching seeds, and breeding. They are highly dependent on healthy, contiguous stands of these habitats. They nest in colonies which vary from 5-60 nests.



The map shows locations where Pinyon Jay presence (red) and absence (teal) was recorded by BLM, ECBA, USFWS, etc.



Source: Great Basin Bird Observatory. *Pinyon Jay Community Science – Presence and Absence Records Map*. Accessed 8/13/2025. <https://pinyon-jay-community-science-gbbo.hub.arcgis.com/pages/7fc19be29133461eb98548b4af28c73b>.



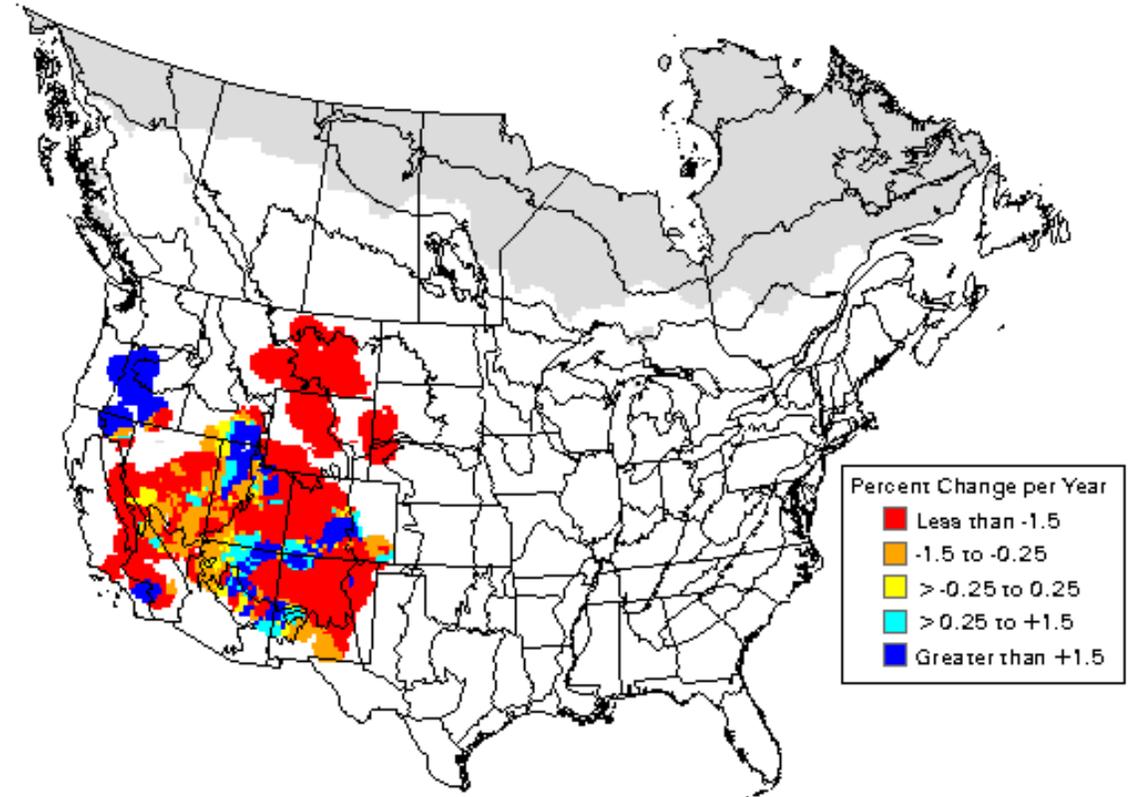
Pinyon Jay Information

Disturbance Sensitivity

- Particularly sensitive to habitat removal or fragmentation (e.g., clearing for development, mining, or infrastructure).
- Human activity that alters tree cover, seed production, or understory composition can disrupt foraging and nesting.
- Repeated disturbance during the breeding season (generally March 1 – May 30) can cause nest abandonment.

Conservation Status

- Population decline (in western states) has been attributed to increased frequency of wildfire and droughts, invasive species, and adverse forest management.
- In 2023, USFWS determined that a petition to list the species as endangered under the ESA may be warranted, prompting a species status review.
 - Status review of the species is getting delayed to 2028

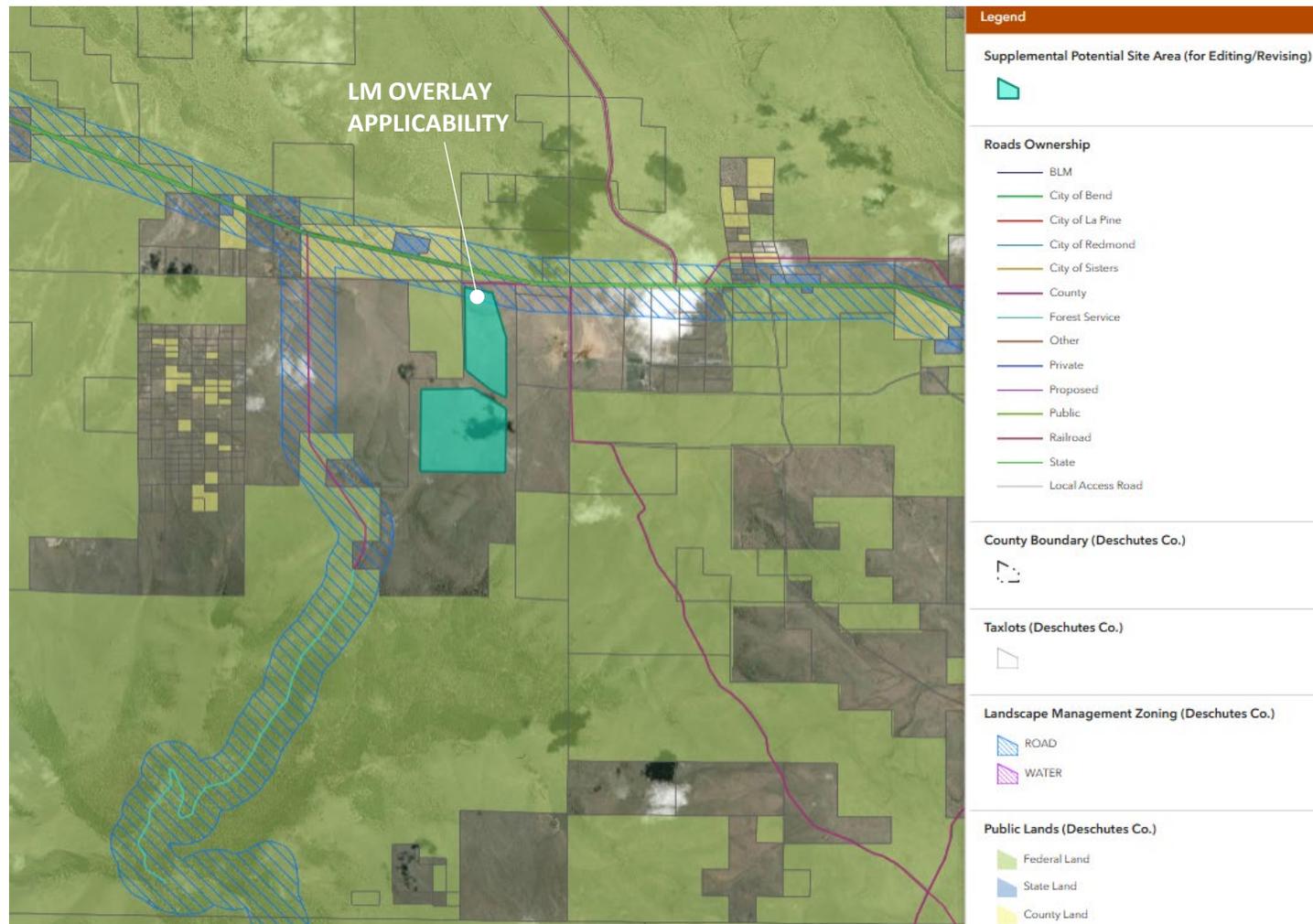


Source: Great Basin Bird Observatory. *Pinyon Jay Community Science – About Pinyon Jays*. Accessed 8/13/2025. <https://pinyon-jay-community-science-gbbo.hub.arcgis.com/pages/7557c7b68258462f801e236cf1d002fa>.



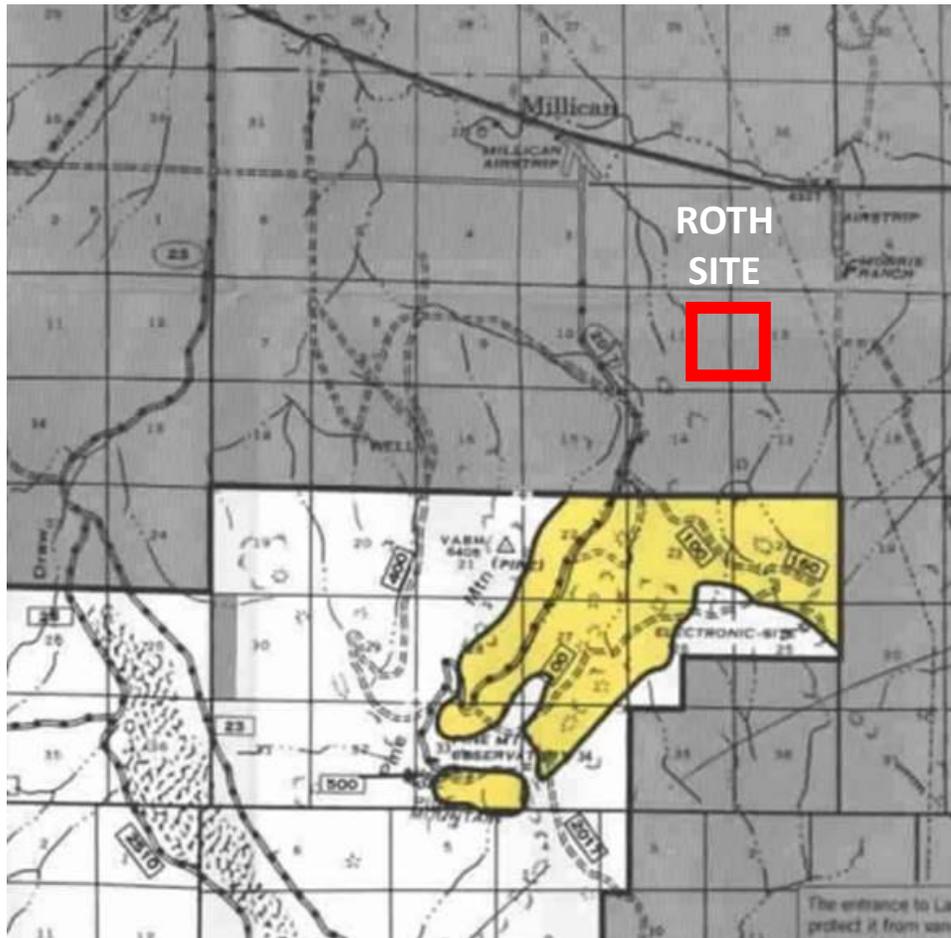
Pine Mountain Road Zone Clarifications

- **Landscape Management (LM) Overlay** applies $\frac{1}{4}$ mile from designated roads and streams, $\sim\frac{1}{2}$ mile width total along centerline
- **Highway 20** and **Pine Mountain Road** have LM overlays (blue hatching).
- Only a small portion of the **Roth Northeast site** conceptual landfill footprint lies slightly inside the Highway 20 LM overlay.
- Proposed development within the LM overlay would be subject to applicable **structure/feature height limitations** and **visual mitigation requirements**.
- Design modifications (berms, grading, vegetative screening) could be required for visibility compliance inside LM overlay.





Pine Mountain Road Zone Clarifications



- **USFS land on Pine Mountain is classified as “Partial Retention”** in the USFS Visual Quality Objectives system, meaning:
 - Management activities may be visible but must remain visually subordinate to the natural landscape.
 - Design goals emphasize blending alterations with the surrounding environment.
- These USFS visual standards apply **only** to lands under **USFS ownership**.
- **Private parcels bordering Pine Mountain Road or USFS lands are not subject** to USFS visual management requirements.

- PRESERVATION
- RETENTION
- PARTIAL RETENTION
- MODIFICATION



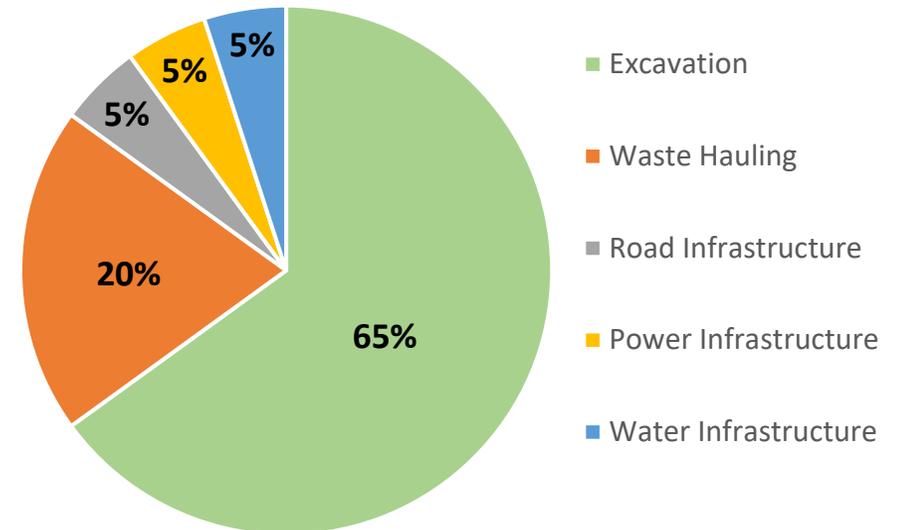
Comparative Cost Factor Analysis

Five major cost factors were identified, which influence the costs to develop and operate a solid waste management facility.

These cost factors include (with estimated weighting):

- Excavation (65%)
- Waste hauling (20%)
- Road infrastructure (5%)
- Power infrastructure (5%)
- Water infrastructure (5%)

Cost Factor Weighting





Comparative Cost Factor Analysis

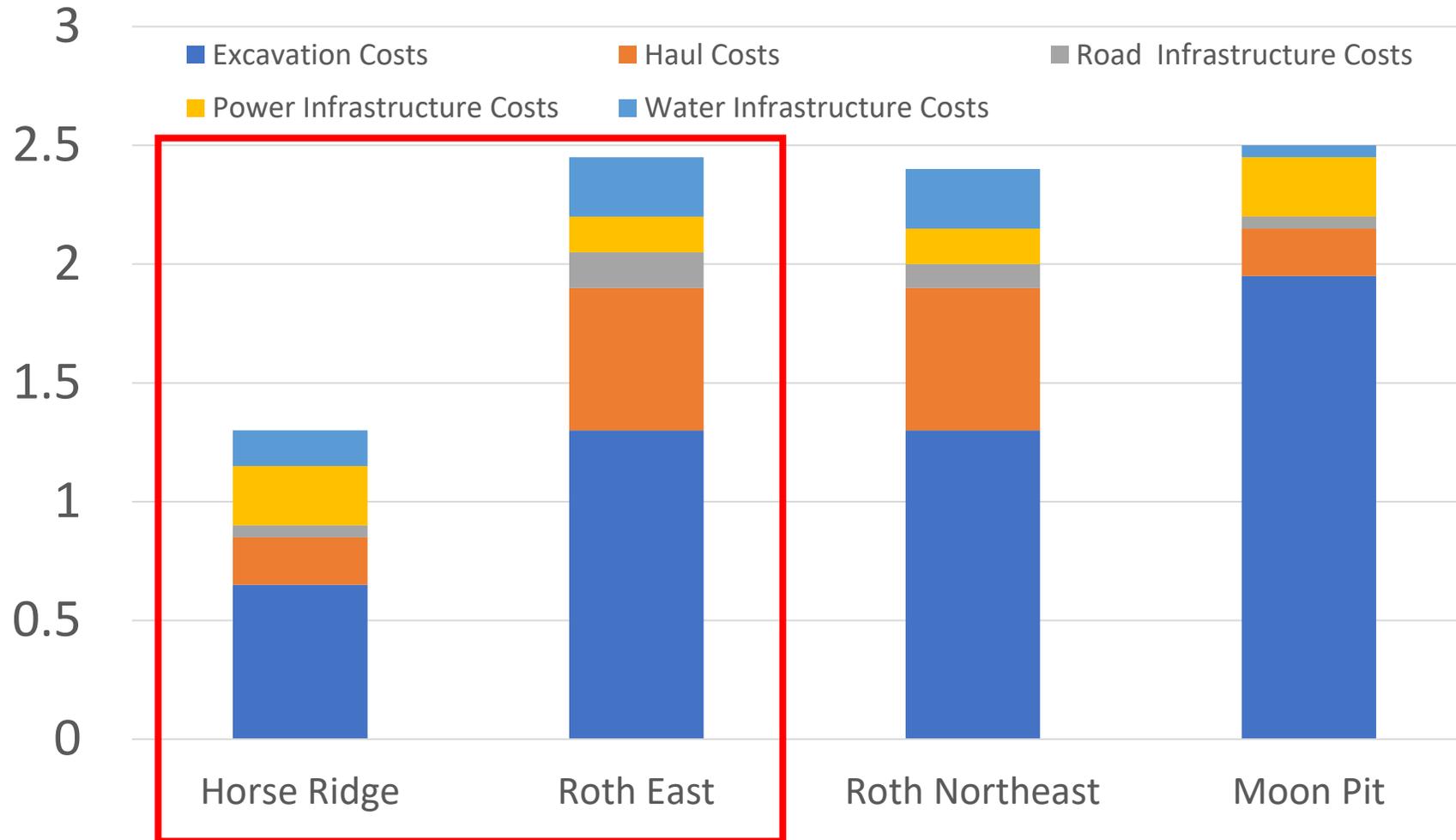
Cost Factor Weighting:	65%	20%	5%	5%	5%	
Site Name	Excavation Costs	Haul Costs	Road Infrastructure Costs	Power Infrastructure Costs	Water Infrastructure Costs	Weighted Average
Horse Ridge	1	1	1	5	3	1.30
Roth East	2	3	3	3	5	2.45
Roth Northeast	2	3	2	3	5	2.40
Moon Pit	3	1	1	5	1	2.50

Each site was given a score of 1 to 5 with respect to each cost factor, where 5 represents the *highest* cost and 1 represents the *lowest* cost.

As a result, the sites with higher weighted total scores are anticipated to be relatively more expensive to develop and operate, while the sites with lower weighted total scores are anticipated to be relatively less expensive to develop and operate.



Comparative Cost Factor Analysis



Based on this cost factor analysis, it is estimated that SWMF development and operational costs could likely be the **lowest for the Horse Ridge site**. The SWMF development and operational costs related to the Roth sites are expected to fall between these two extremes, being more expensive than the Horse Ridge site and less expensive than the Moon Pit site.



COST ESTIMATES

	<u>MOON PIT</u>	<u>ROTH EAST</u>	<u>HORSE RIDGE (preliminary comparison)</u>
INITIAL SITE ACQUISITION COST	\$15,370,000-\$15,870,000	\$5,500,000	TBD, \$6-10 Million Estimated
INITIAL DEVELOPMENT COST	\$50 - \$64 M (2026-2031)	\$36 M (2026-2031)	Likely somewhere between Roth And Moon Pit
CELL DEVELOPMENT COST PER ACRE	\$705,000-\$1,075,000/acre	\$393,000/acre	Similar To Roth, due to favorable soils and topography
OPERATIONAL COST	\$7.6 M/ year	\$8.4 M/year	Similar To Moon Pit, due to similar haul distance
ANNUAL HAUL COST	\$2.5 M/year	\$3.3 M/year	Similar To Moon Pit, due to similar haul distance
Avg Cost/Ton (over lifespan)	\$43-48/ton	\$45/ton	Potentially Lower Than Moon Pit And Roth Sites

Please see [Final Site Evaluation Report](#) and [Appendix Q – Cost Estimates](#) for more information, available at deschutes.org/managethefuture.

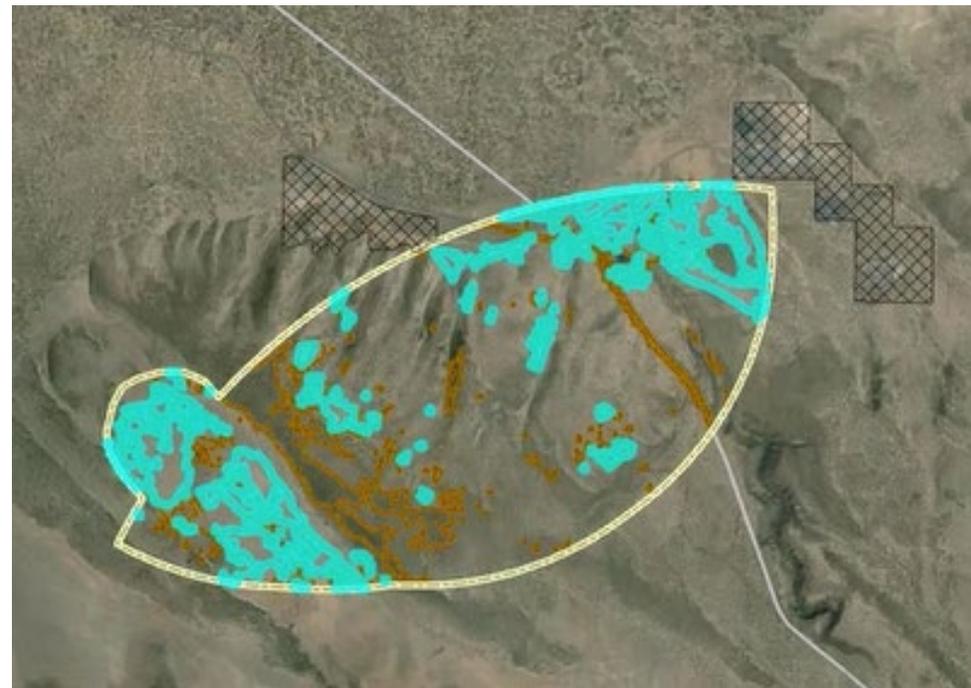
NOTE: Horse Ridge costs would be estimated in detail with the Final Site Evaluation, as with Moon Pit and Roth East sites.



Preliminary Habitat Quantification Tool (HQT) Updated Results

Horse Ridge

- Located ~1 mile from Low Density Sage-Grouse Habitat; no impacts to Core Area.
- **Sage Grouse Preliminary HQT Result: -19.1** functional acres impacted.
 - **In-Lieu Fee (ILF) estimate: \$650,944** (2021 dollars, to be adjusted upward) for 100-year landfill lifespan.
- Located in **Category II elk/mule deer winter range** → additional mitigation required per ODFW guidelines.

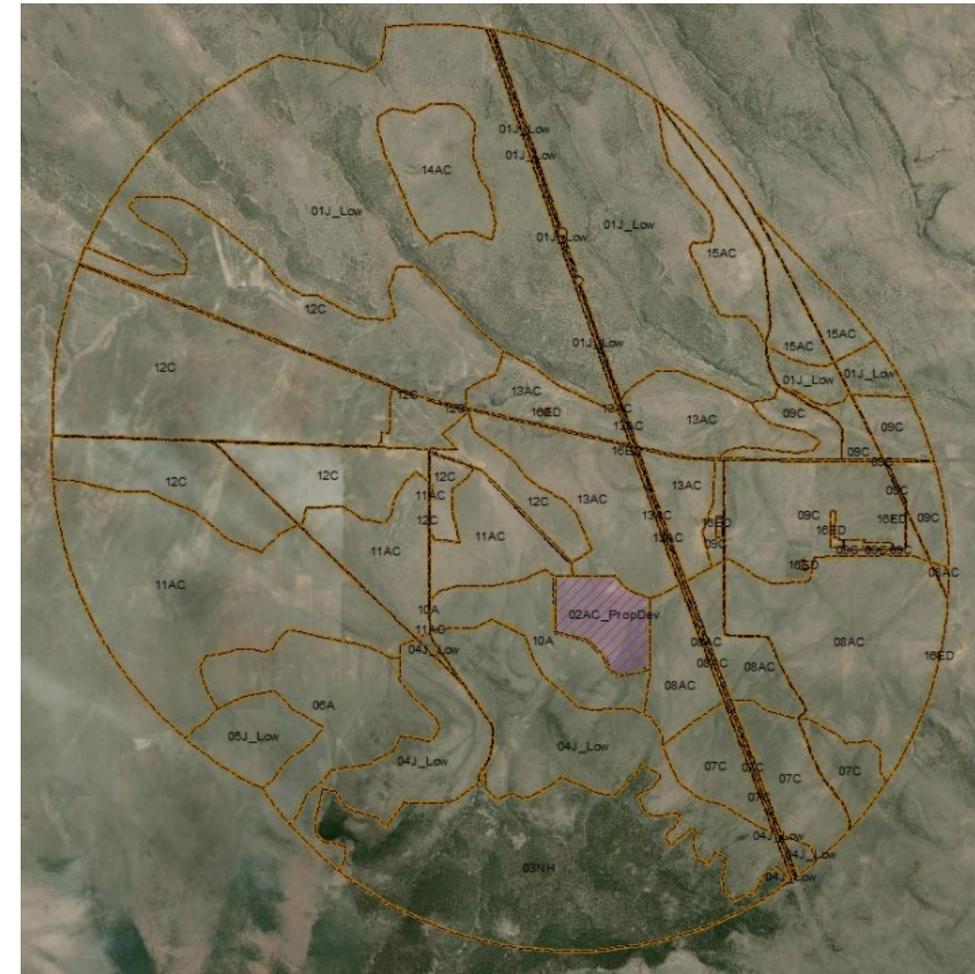




Preliminary Habitat Quantification Tool (HQT) Updated Results

Roth Sites (East & NE)

- Within **Low Density Sage-Grouse Habitat**, Core Area ~0.5–0.8 mi SE.
 - Subject to **Division 140** rules: development must demonstrate no feasible alternative outside sage-grouse habitat, or development depends on site-specific physical features.
- **Sage Grouse Preliminary HQT Result (2023)**: –199.3 functional acres
 - HQT was not rerun; 2023 estimate subjected to change.
 - **ILF estimate: \$7.6 million** (2021 dollars, to be adjusted upward) for 100-year landfill lifespan.
- Located in **Category II elk/mule deer winter range and pronghorn habitat** → additional mitigation required per ODFW guidelines.
- HQT does not account for modeled sage grouse migration route the Roth NE site seeks to avoid, shifting site north does not reduce calculated habitat impacts and mitigation requirements.





Mitigation Options and Estimated Costs for Roth East

Mitigation Option	Mitigation Acres	Potential Enhancement Actions	Real Estate Sale Price	Initial Enhancement Project Cost	O&M Cost (50 years)	Total Cost
On-site*	~500	Juniper removal, livestock grazing restrictions, native revegetation/restoration.	N/A	\$196,675	\$1,770,057	\$1,966,750
Parcel Acquisition and Mitigation	221-560	Juniper removal, livestock grazing restrictions, native revegetation/restoration	\$158,610-\$401,433	\$86,930-\$220,276	\$782,373-\$1,982,484	\$1,029,645-\$2,605,964
Conservation Agreement with Landowner	221-560	Juniper removal	N/A	\$86,930-\$220,276	\$782,373-\$1,982,484	\$871,034-\$2,204,530
In-Lieu Fee	199.3 functional acres	Payment to ODFW	N/A	N/A	N/A	\$7,600,000

*Mitigation will likely be insufficient to uplift 199.3 functional acres of sage-grouse habitat and will need additional action.



Summary of Compensatory Mitigation for Roth East

Habitat	Impacted Habitat (acres)	Quality of Impacted Habitat	Mitigation Amount	Mitigation Options	Estimated Cost Range
Mule deer and elk winter range and essential and limited pronghorn habitat	309.3 Shrub steppe	Moderate/low for mule deer and elk High for pronghorn	Net benefit of habitat quantity or quality	On-site and off-site acquisition and enhancement of a parcel of land	\$1,075,976– \$1,236,357
Significant sage-grouse habitat	173.3	High to Moderate	199.3 Functional Acres = 221–560 acres of mitigation	On-site mitigation, acquisition and enhancement of land, conservation agreement with landowner, and in-lieu fee payment.	\$871,034– \$7,600,000

Please see [Final Site Evaluation Report](#) and [Appendix N – Natural Resource Assessment](#) for more information, available at deschutes.org/managethefuture.

Total: \$1,947,010 – \$8,836,357



Mitigation Cost Estimating

The 4/16/2024 SWAC recommendation to select the Moon Pit site also included a recommendation that the County:

“Work with stakeholders to develop and implement a robust and comprehensive mitigation strategy that reflects community values to minimize impacts to area wildlife and recreation.”

While there are more cost-effective options than ILF to meet statutory mitigation requirements, the April 2024 SWAC directive could result in additional mitigation costs in excess of statutory requirements and ILF estimates, if implemented.



Public Comments



Public Comments

3 minutes per person, tentatively, depending on the number of people wishing to comment and time available.

Written comments can also be sent to:
managethefuture@deschutescounty.gov



SWAC Discussion, Deliberation, and Decision

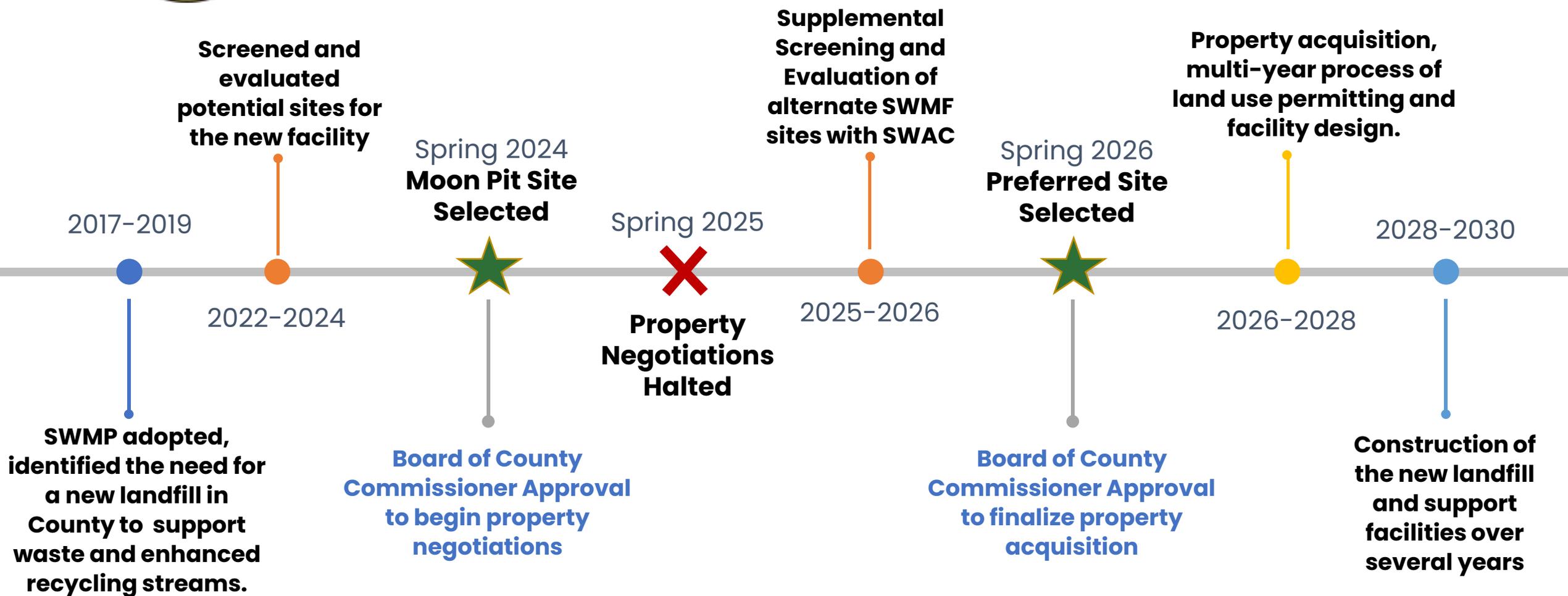


SWAC Discussion

- 1. What site do you think would best serve the County long-term, based on the information presented to-date?**
- 2. Are there any sites you would recommend moving forward?**
- 3. Other thoughts/questions?**



Roadmap to Opening in 2031





What happens next...

Necessity of future SWAC Meetings to be determined, based on SWAC Decision and Recommendation at August 2025 Meeting.

Public Input:

- Public comment reviews & responses
- Correspondence & meetings with interested parties

Ways to stay up to date:

- Visit: deschutes.org/managethefuture
- Email: managethefuture@deschutescounty.gov



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

Informational Story Map

Deschutes County Department of Solid Waste | August 2024



Adjourn

