



Solid Waste Management Facility Siting Study

Solid Waste Advisory Committee (SWAC) Meeting

July 15, 2025





Agenda

1. Introductions/Welcome
2. Review/Approve June Meeting Minutes
3. Property Acquisition Updates
4. Public Outreach Updates
5. Additional Site Screening Information
6. Public Comment
7. SWAC Discussion & Deliberation
8. Adjourn



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 scheduled for 7/14.**
- Met with Hap Taylor & Sons, LLC pit owner (Knife River Corporation) onsite 4/22.
- **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.**
- **ODOT is willing to transfer ownership and maintenance responsibility of Horse Ridge Frontage Road to Deschutes County.**

Dodds Rd Site

- COID indicated initial preference for land lease agreement, over lump sum purchase
- **COID heard public comments in opposition to a potential Dodds site in July board meeting**
- **An official decision is expected to be made at the COID Board meeting in August**

Roth Sites

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



Public Outreach Updates

- **Tribal Engagement**

Outreach to Confederated Tribes of Warm Springs with site maps and KMZ files to gather input on cultural and historical considerations. **Email reply received.**

- **Recreation Stakeholder Coordination**

Contacted Central Oregon Trail Alliance (COTA) regarding mountain bike and hiking trails near Horse Ridge Site. **Email reply received.**

- **Regional Solutions Team Notification**

Updates shared with Oregon's Regional Solutions Team; offer extended to present at upcoming meeting

- **Environmental Advocacy Notification**

Letter sent to Central Oregon Conservation Network (COCN) with project overview and GIS data to inform and invite feedback. Email reply received from Central Oregon LandWatch, Oregon Natural Desert Association, and The Environmental Center

- **Reviewing public comments and distributing to the SWAC**



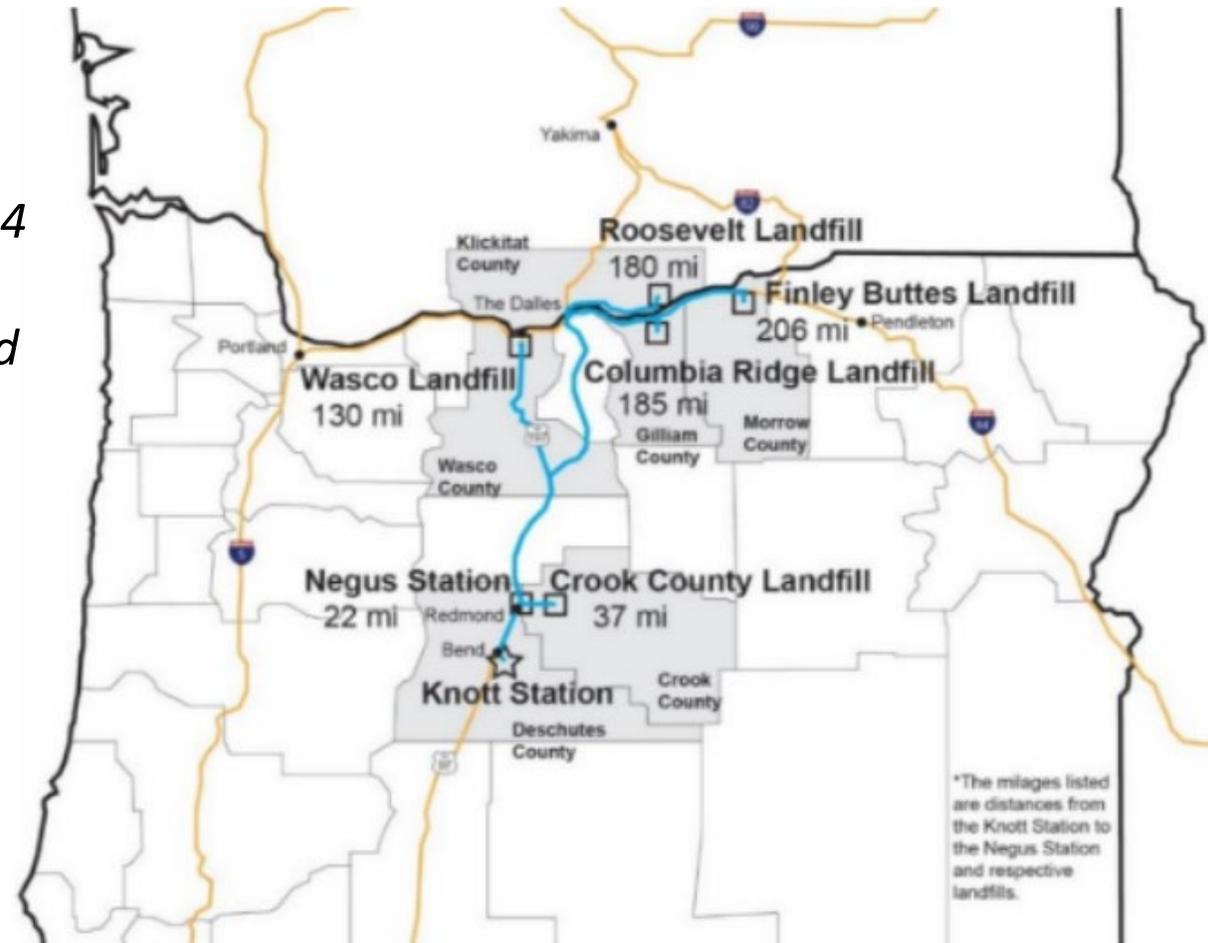
Additional Site Screening Information



Long Haul vs. In-County Landfill

Why Not Just Haul Waste to the Gorge?

- **Extensively Studied:** Evaluated in 2019 SWMP and 2024 Alternatives Analysis
- **Higher life-cycle costs:** MSW export costs are estimated to be to 2x more than a local landfill over the lifespan. (see JRMA report in BOCC 3/19/2025 meeting)
- **More Risk:** Ties County to long-term private contracts with future cost uncertainty, as well as disruptions and accidents due to adverse weather events.
- **Higher Emissions:** 100+ mile hauls mean more truck traffic & greenhouse gases.
- This is a board decision and the BOCC recently re-affirmed their support for siting an in-county landfill.



Source: JRMA. Transfer Station and Long-Haul Alternatives Analysis. Prepared for Deschutes County Solid Waste Department. January 2024. Figure 1 – Transfer Routes to Regional Landfills.



Site-Specific Risks and Challenges

Horse Ridge Site

- Requires **three separate property acquisitions** (Horse Ridge Pit LLC, ODOT, Knife River), increasing legal/negotiation complexity
- Adjacent to **Horse Ridge trails** and nearby to the **Badlands Wilderness Area** – which increases visibility and public opposition risk
- SM Zoning requires a legislative text amendment to allow for landfilling as a reclamation activity on surface mine sites.
- **No existing water rights**, though two exempt-use wells exist onsite and an owner holds nearby water rights



Site-Specific Risks and Challenges

Dodds Rd Site

- **Proximity to Homes:** ~60 dwellings within 2 miles, 18 within 1 mile, 3 within 0.5 mile – highest residential proximity of all sites currently under consideration. With many of these site neighbors being COID patrons, this could complicate COID's willingness to sell.
- **Excavation/Topography:** Requires 150–200 ft of fill for 100-year capacity – significant prominence and visibility, attracting negative attention, opposition, and birds, as well as complicating litter control. Height limitations could be imposed as a condition of approval.
- **Shallow basalt bedrock** – poor Excavation/Volume ratio, challenging excavation, limited soil for cover/liner
- Zoned EFU-Alfalfa, mapped as “**farmland of statewide significance**”. If it was irrigated or there were associated water rights historically, it may be classified as **high-value farmland**, impacting land use approval.
- **No water rights or existing wells onsite** increase reliance on interim water trucking for water supply until water rights can be secured.



Site-Specific Risks and Challenges

Roth East / Northeast Sites

- Within Low Density Sage-Grouse Habitat, with Core Area <0.5 mi SE – will trigger state and County sage-grouse mitigation requirements
- Opposing testimony, delays, and appeals from members of the public and organizations such as COLW, ONDA, TEC, Pine Mountain Observatory, etc. could delay approval of land use and solid waste permit applications.
- There are no water rights associated with the site or existing well(s). The timeline and likelihood of securing and mitigating a new groundwater permit is uncertain.
- Legislative Text Amendment to change the timing restriction for disposal site land use approval
- Farm Impacts Test could be a challenge.



Site-Specific Risks and Challenges

Moon Pit Site

- Disagreements over acquisition timeline, property appraisal, and water rights valuation.
- The change of use to the access road through BLM requires NEPA – likely an Environmental Impact Statement (EIS), subjecting the project to lengthy review periods and indefinite appeals.
- Adjacent to Badlands Wilderness and public trailhead – visible and may draw public concern over potential impacts to the recreational experience.
- Unanticipated poor rock material qualities and/or market values could diminish the extent to which aggregate mining can subsidize cell development costs.
- SM Zoning requires a legislative text amendment to allow for landfilling as a reclamation activity for exhausted surface mine sites. This is a prerequisite for the conditional use permit application.



Water Supply and Hydrogeology

Site	Horse Ridge	Roth East / Northeast	Dodds Rd	Moon Pit
Depth to Groundwater	850–950 ft	460-630 ft	621–713 ft	850 ft
Offsite Wells mapped within 1-mile	2	5	11	0
Existing Onsite Wells	2	1-2	0	2
Water Supply Strategy (tentative)	2 existing exempt wells for baseline water demands. Potential development of additional exempt wells on each taxlot. Truck supplemental water in until water rights are secured.	1-2 existing exempt wells onsite for baseline water demands. Potential development of additional exempt wells on each taxlot. Haul in supplemental water until water rights are secured.	Establish 1 exempt well onsite for baseline water demands. Haul in supplemental water until water rights are secured.	Utilize the existing onsite industrial well and negotiate transfer of a portion of Hooker Creek’s existing water right to County for landfill uses.



Water Supply and Hydrogeology

How much water will the new landfill require?

- Water usage is expected to be less than 5,000 gallons per day in the winter months (November-February) and up to 50,000 gallons per day in the heat of summer when dust suppression needs peak.
- Exempt domestic wells are authorized to withdraw up to 5,000 gallons per day without a groundwater permit (water rights)
- The anticipated landfill water usage is comparable that of 6-10 domestic wells.



Water Supply and Hydrogeology

Knott Landfill Water Usage (2020)

Month	Volume Used (Cubic Feet)	Volume Used (Gallons)	Max Exempt Well Production (Gallons)	Days In Month	Average Volume Used (Gallons per Day)
January	0	0	155,000	31	-
February	15,500	115,940	140,000	28	4,141
March	40,700	304,436	155,000	31	9,821
April	62,240	465,555	150,000	30	15,519
May	139,200	1,041,216	155,000	31	33,588
June	112,400	840,752	150,000	30	28,025
July	187,100	1,399,508	155,000	31	45,145
August	178,500	1,335,180	155,000	31	43,070
September	104,400	780,912	150,000	30	26,030
October	57,900	433,092	155,000	31	13,971
November	5,200	38,896	150,000	30	1,297
December	15,800	118,184	155,000	31	3,812
Total	918,940	6,873,671	1,825,000		

Monthly volumes of water used for landfill site operations at Knott Landfill during 2020 were reviewed.

Water use for the new landfill will initially be smaller, but will grow over time, and are anticipated to ultimately be similar to the Knott Land fill water demands.



Rock Blasting and Onsite Soil Usage

Which sites will require rock blasting? How frequently?

Roth East

Horse Ridge

Moon Pit

Dodds Road



Blast frequency (none)
Rock occurrence (low)

Blast frequency (high)
Rock occurrence (high)

Note: blasting is not expected to be a daily activity for any candidate SWMF site. At Knott Landfill, rock excavation typically requires up to 4 blasting days per cell construction which occurs every 3 years on average



Rock Blasting and Onsite Soil Usage

How will materials be sourced for daily and intermediate cover?

- **Roth East** - abundant on-site soils suitable for cover material; will require screening to separate oversized materials. Rock crushing would occur as-needed to produce road base.
- **Horse Ridge** – On-site exposures indicate 20+ feet of alluvial deposits within the valley, and shallow bedrock within sloped areas; alluvial deposits would be screened and processed for cover, cushion, and drainage materials. Shallow rock would be drilled, blasted, and crushed for drainage layer and road base.
- **Moon Pit** – Thin veneer of silty sand alluvial deposits over shallow rock; rock to be drilled, blasted, and crushed for excavation.
- **Dodds Road** – Thin and limited silty sand overburden with rock outcrops exposed at the surface; rock to be drilled, blasted, and crushed for soil cover, with potential need for importing supplemental soil cover material.





Landfill Height and Zoning

- **EFU zone:** 30-ft structure height limit from *finish grade* - which would be the landfill final cover elevation – so 30' structure limit does not constrain landfill height.
- **LM zone:** 30-ft height limit from average *natural* grade. This does not allow for exceptions. This only applies to the structure area visible to the roadway (Hwy 20) for the Roth Northeast site.
- **SM zone:** No height restrictions.
- Although there is no explicit height limitation in state and federal codes, the ultimate site-specific landfill peak elevation will be influenced by the footprint shape, slope stability, drainage, visual blending, and possibly local permit conditions of approval.



FAA Guidance and Airport Proximity

FAA Guidance & Regulatory Context

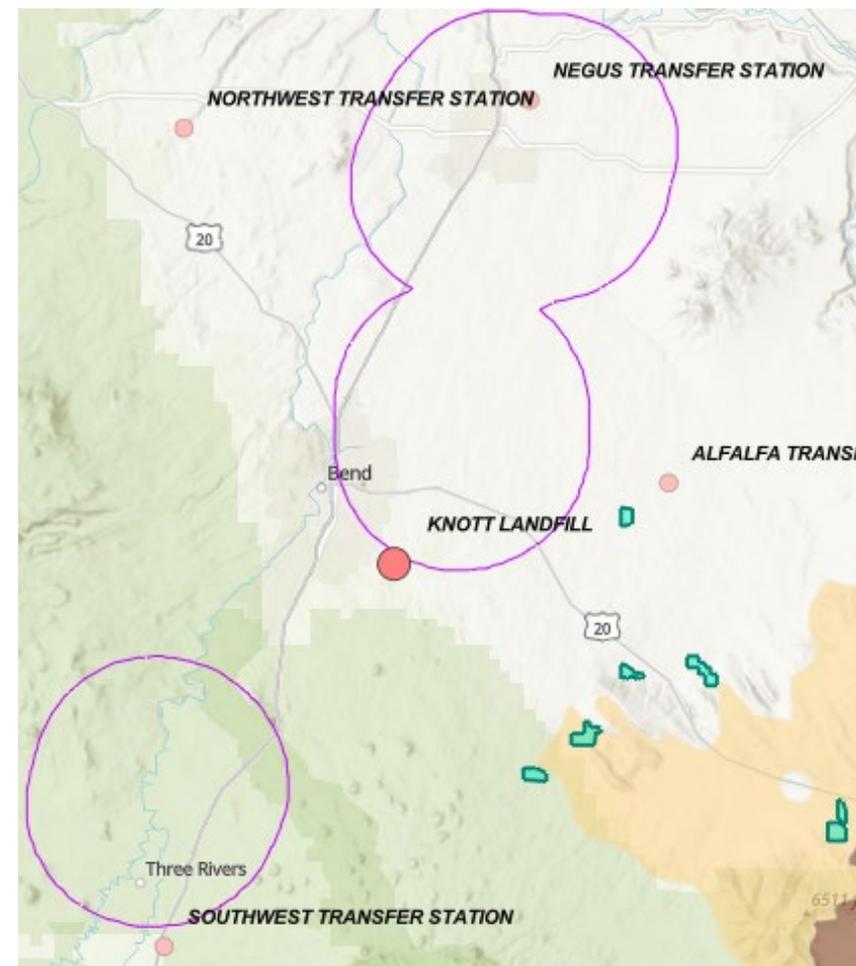
- **FAA AC 150/5200-33C** establishes a recommended **5-mile buffer** between landfills and airports to mitigate bird strike risks.
 - **Section 1.4** (general wildlife attractants): Measure from aircraft *operations* area—**not controlling** for landfill siting.
 - **Section 2.2.2** (landfill-specific): Measure **property-to-property**.



FAA Guidance and Airport Proximity

Local Interpretation & Application of FAA 5-mile recommendation:

- Sites within 5-mile buffer (e.g., Rickard, Bear Creek, Negus) were screened out per FAA recommendations and the decision by the BOCC and SWAC to consider not sites that go against the recommended 5-mile buffer.
- While a smaller acceptable landfill footprint could theoretically enable placement outside the 5-mile buffer, no specific landfill sites appear to benefit from this change.
- Reintroducing these sites would contradict previous decisions and technical evaluations.

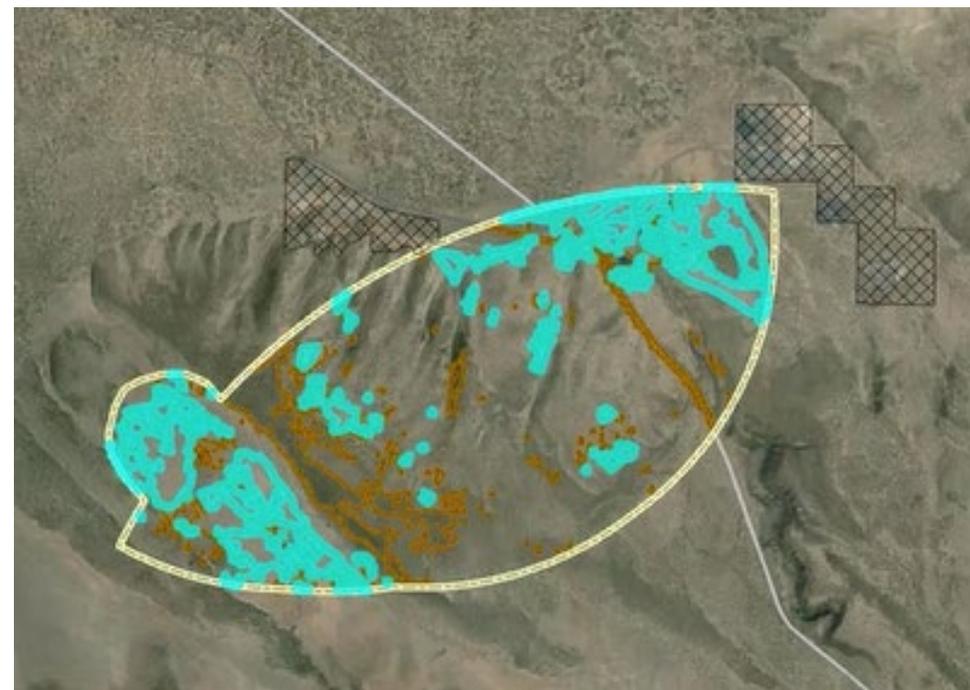




Preliminary Habitat Quantification Tool (HQT) Updated Results

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.

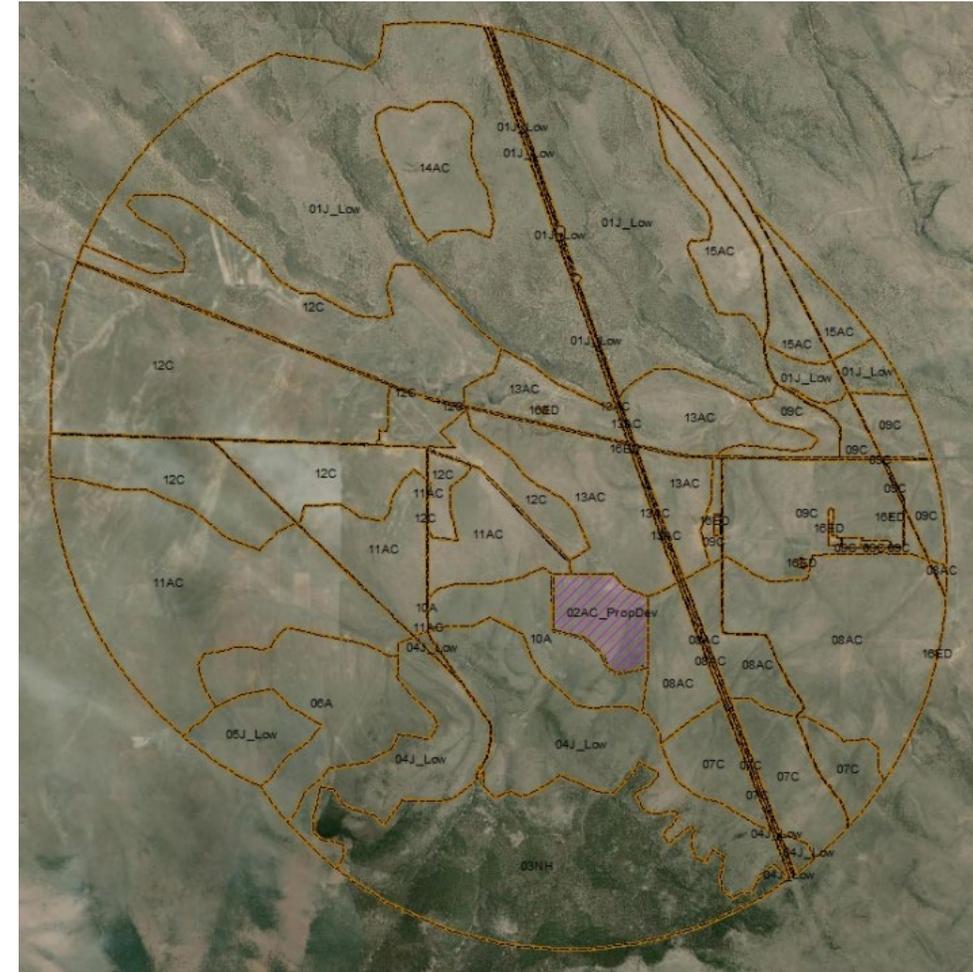




Preliminary Habitat Quantification Tool (HQT) Updated Results

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.

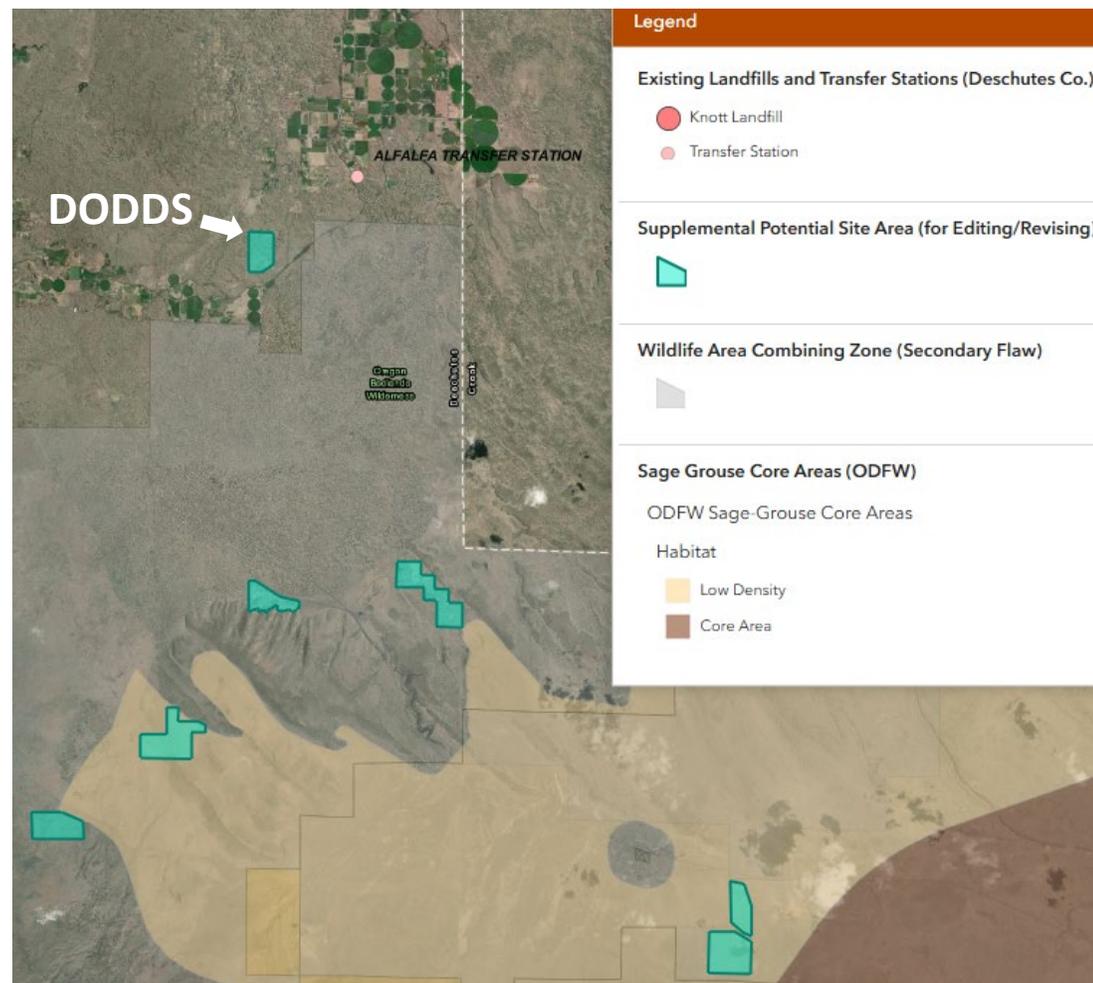




Preliminary Habitat Quantification Tool (HQT) Updated Results

Dodds Road

- Outside mapped sage-grouse HQT zone → **no sage-grouse mitigation required.**
- Located in **Category II mule deer/elk winter range habitat** but outside of County Wildlife Area Combining Zone → may require wildlife mitigation per ODFW guidelines.
- High visibility and residential proximity may increase scrutiny of wildlife impact minimization.

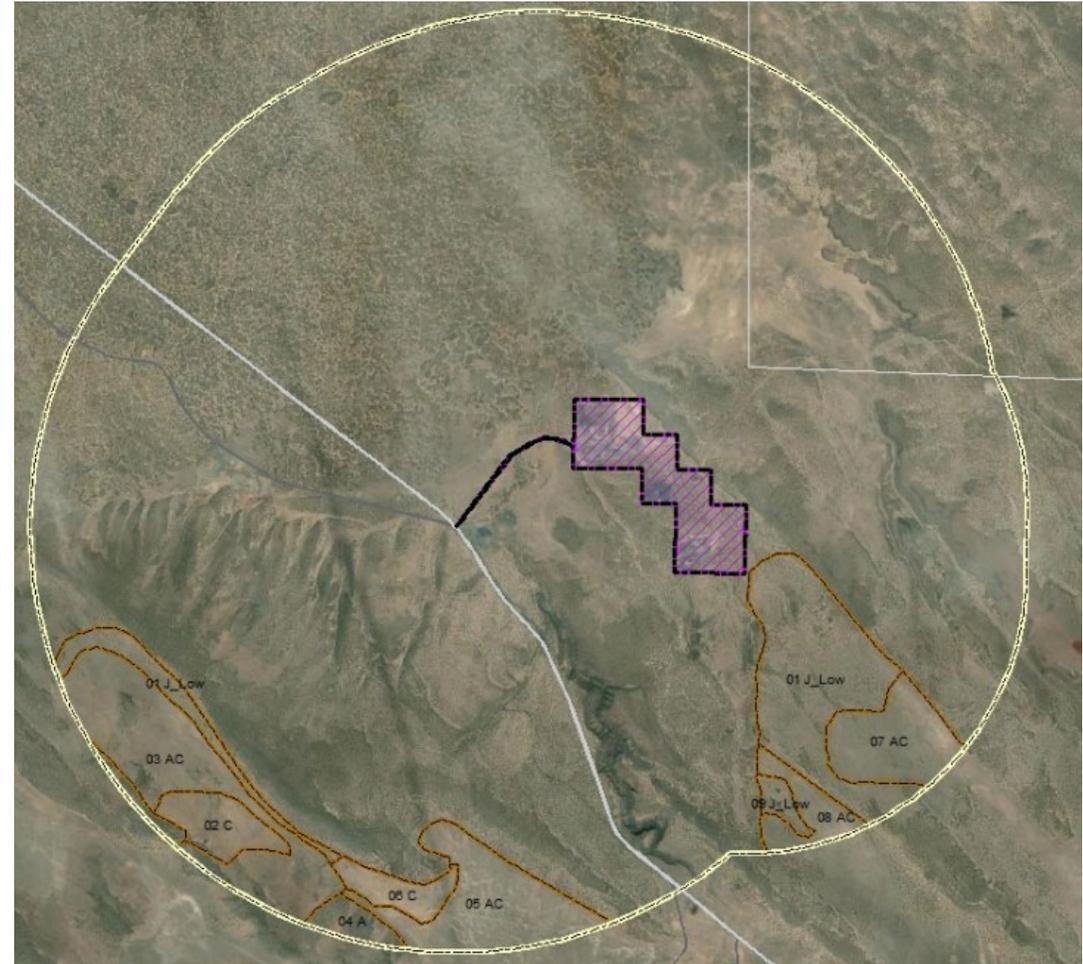




Preliminary Habitat Quantification Tool (HQT) Updated Results

Moon Pit (for Reference)

- **Sage-Grouse Zone:** Located 0.05 mile from Low Density Sage-Grouse Habitat; no impacts to Core Area.
- **Sage Grouse Preliminary HQT Result (2025):** -4.6 functional acres impacted.
- **ILF estimate:** \$150k - \$270k (TBD pending ODFW calculation)
- 2023 Preliminary HQT was 9 functional acres, ILF Estimate: \$538k
- **Big Game Habitat:** Located in Category II habitat for elk/mule deer winter range and pronghorn habitat. However, existing surface mine and roads reduced habitat impact compared to other sites in Category II habitats.
- **Net Result:** Among the lowest habitat mitigation burden of all sites evaluated to date. Moon Pit's location and prior use as a surface mine substantially reduces ecological impacts and regulatory requirements.





Public Comments



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



SWAC Discussion and Deliberation

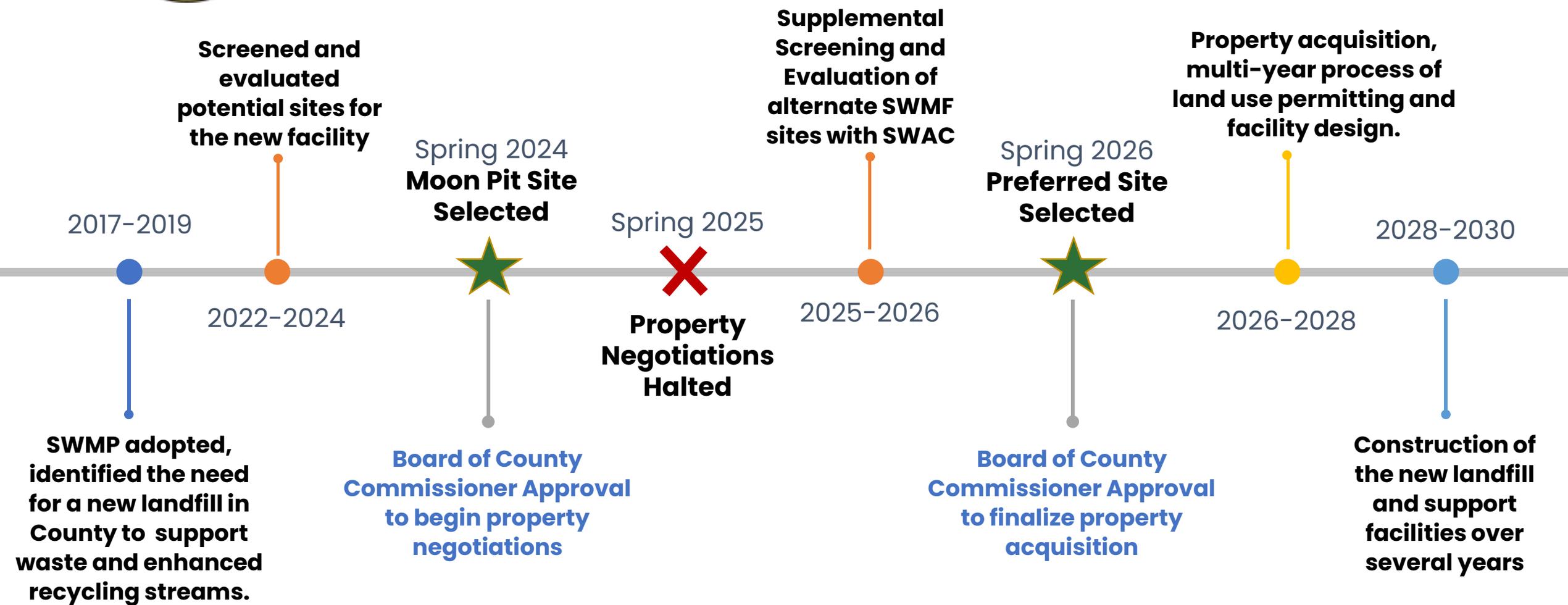


SWAC Discussion

- 1. Do the analyses and information presented appear to be accurate and fair, for the purposes of comparing candidate sites?**
- 2. At this point, what site(s) do you think would best serve the County long-term, based on the presented analyses?**
- 3. Are there any sites you would recommend moving forward with?**
- 4. Are there any additional data or considerations to make a decision at this time?**
- 5. Other thoughts/questions?**



Roadmap to Opening in 2031





What happens next...

Continuation of SWAC Meetings in 2025 for supplemental site screening and recommendation of alternate SWMF site (if needed):

- August 19, 2025, 9-11 am: recommendation for final site evaluation or selection

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

