Kat Taylor Public Comments
RE: July 16, 2024 JRL Expansion PBD Application Meeting
https://www.maine.gov/dep/waste/juniperridge/index.html

*"Failure to properly prepare on **your** part…*
*Does not constitute an emergency on **my** part"*

Thursday, September 5, 2024

Good Afternoon,

My name is Kat Taylor I'm a resident and property owner in Argyle, a small unorganized township about 20 miles north of Bangor and adjacent to Old Town and Alton where the Juniper Ridge Landfill is sited.

Argyle is less than 2.5 miles as the crow flies from JRL where westerly winds carry odors and toxins over the intervening Alton Bog, a prime wildlife habitat and source of pure drinking water, flowing across our properties, through migratory bird nesting grounds and into the Penobscot River.

These are **my public comments regarding the Public Benefit Determination** (PBD) **Application** submitted for review to the Department of Environmental Protection (DEP) on expanding the Juniper Ridge Landfill (JRL).

I hope to provide context to the current situation surrounding waste diversion efforts that **may extend the lifespan of JRL without expansion.**

Briefly, **it is premature to approve any PBD application** since there is insufficient information supporting the need for landfill expansion. **Upcoming efforts** for waste diversion taking effect **over the next two years may make immediate expansion unnecessary**.

Earlier this year **Representative Jim Dill** submitted **LD 2135,** an **emergency resolve** to investigate and address ***Municipal Solid Waste Disposal Services*** issues in our area, to the Environment and Natural Resources (ENR) committee.

> (See Attached orginal ***H.P. 1359, L.D. 2135, "Resolve, to Investigate and Address Municipal Solid Waste Disposal Services Issues***")

The intent of this bill was **to investigate the crisis surrounding JRL and its diminishing capacity** estimated to be **exhausted in 2028** and **find solutions to relieve JRL from misuse that is causing its early demise.**

Representative Dill's bill was **appropriated by the ENR committee** and **amended** to be **a resolve investigating the potential of the Jay Landfill** site and **amending Casella's Operating Services Agreement (OSA).**

> *COMMITTEE AMENDMENT "Amend the resolve by striking out the title and substituting the following:* ***'Resolve, Regarding the Operation and Future Capacity of State-owned Landfills'***
> (See attached amended LD 2135)

It is not clear **what impact this amended resolve will even have on JRL's capacity** that is arguably in crisis. But the fact that Jim Dill had to bring forth an emergency resolve (backed up by Bill Mayo, Old Town Manager) regarding the issues in our area with waste management, speaks to the importance of **having something in place that the citizens can agree upon and the state can control.**

There isn't enough time before the 132nd session, when new ENR committee members may be chosen, to make an informed decision.

CWS originally gained control of JRL using a 'crisis' in the pending layoff of 300 workers at the Old Town papermill. Those jobs were lost anyway within 3 years. **The state should use caution before reacting to a perceived crisis.**

Despite ongoing efforts by the DEP in planning *Materials Management*, right now **we seem to be following the waste hierarchy in reverse**; where **landfill is the first choice** and waste diversion is somewhat confusing, convoluted or non-existent so residents don't normally participate except as a workaround for *Pay as You Throw* services.

> *"I'll just come right out and say it: it's easier to throw away trash than it is to recycle it,"* **Susanne Miller, director of the Bureau of Remediation and Waste Management at the Maine DEP**, told lawmakers earlier this year.
> https://www.bangordailynews.com/2024/07/24/bangor/bangor-environment/maine-will-decide-juniper-ridge-landfill-august/

We're being asked to decide *right now* to approve or not approve this PBD Application. **Waste diversion facilities** and **efforts that are due to bear fruit in 2025** will better assist the public in making this determination.

But there is not enough information available *now* for the public to make an informed decision on whether or not **expanding capacity** (and subsequently **extending** Casella's **OSA another 6 years** until 2040) is really needed, let alone if it is for the public's benefit.

Casella Waste Services (CWS) benefits from a quick decision before any serious thought has been given to the issue.
The **public benefits** from **delaying** any decision **until 2026**.

On July 30, 2024, four days after the last PBD App. meeting, the DEP sent a 23 question additional information request to Casella.
(See Attached *2024_07_30 JRL PBD additional information request*)

Sevee & Maher Engineers (**SME**), the architects of JRL **responded** to this request on **August 9th**.

In order to assess the response, the **DEP** was allowed an **extension until September 23, 2024** based on the additional information received. **Public Comments deadline** has been pushed back to **September 6, 2024**.

There is **little time left between the 6th deadline for comments and** the **September 23rd** deadline for the DEP to make such a **complicated decision** that will affect the residents living around JRL **for the next 16 years**.

Additional information, that will directly impact JRL's remaining capacity, **provided below, argues it is premature to make any decisions regarding an expansion of JRL** given the existing data**.**

➢ *The Materials Management Task Force (MMTF)*

One major reason for delaying any decision for JRL expansion is the newly created ***Materials Management Task Force.*** The MMTF was created to bring **solid waste management strategies** into **future climate planning efforts** to **complement** the **existing strategies** outlined in *Maine Won't Wait*, **the state's four-year climate action plan.**
https://www.maine.gov/future/future/initiatives/climate/climate-council/materials-management-task-force?q=future/initiatives/climate/climate-council/materials-management-task-force

Reducing emissions from materials management has been **identified** as a **priority** for **comprehensive climate planning.**

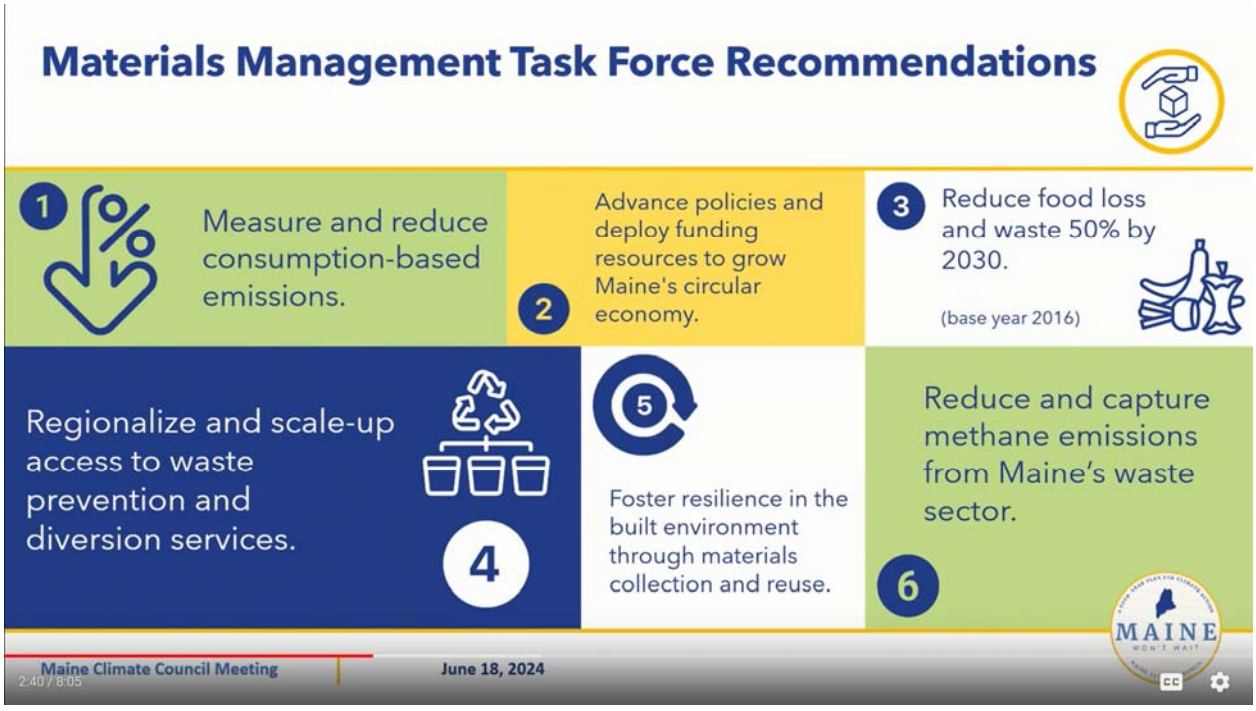
Landfills are a major contributor to Greenhouse Gas emissions affecting climate change. The larger the landfill, the more landfill gas created.

Why Controlling Landfill Methane Is Key to Slowing Climate Change
https://www.scientificamerican.com/article/why-controlling-landfill-methane-is-key-to-slowing-climate-change/)
(Also see MMTF slide and *Air Quality* below)

The Task Force will serve as a forum for members to learn about opportunities for **increasing efficiency in materials management programs** and **infrastructure, scaling up** and **increasing waste diversion** and **prevention** programs, **reducing emissions** related to **materials use** and **end-of-life management**, and **new technologies** and **processes** for **reducing greenhouse gas emissions from waste**.

Here is a great (brief!) video of **DEP Commissioner Melanie Loyzim** discussing the newly formed **MMTF's Recommendations** and how proper materials management affects **Maine's climate change goals:**

Maine Climate Council Quarterly Meeting
Materials Management Task Force Recommendations | June 18, 2024
https://www.youtube.com/watch?v=q7p4PPRFjOc



We finally have a comprehensive group of industry professionals, educators, environmental groups and state officials, assisted by the ***Governor's Office of Policy Innovation and the Future (GOPIF*** *https://www.maine.gov/future/* ***)***, to **focus on materials management and waste diversion**.

Assistance from *GOPIF* could bring **billions of dollars** in potential funding:

Community Change Grants (CCG)	IRA - EPA	**$2B** for projects that **reduce pollution, increase community climate resilience**, and **build community capacity** to address **environmental** and **climate justice challenges**. **Waste a focus area.**

A **delay until 2026** would give the MMTF time to **put** their **plans to work**, and **measure the positive outcomes**, instead of **rushing into** a **16 year contract** that **perpetuates** a system of '**buy and toss' habits** that are destroying our planet.

(See ***2024-WG-Deliverable-Template-MMTF***
https://www.maine.gov/future/sites/maine.gov.future/files/2024-07/2024-WG-Deliverable-Template-MMTF.pdf)

➢ *Municipal Waste Solutions (MWS)*

The **Municipal Review Committee** plans to have their new facility, *Municipal Waste Solutions* (**MWS**) **online by 2025**. https://www.mrcmaine.org/
(MRC Youtube board meeting recordings: https://www.youtube.com/@municipalreviewcommittee9846)

The MRC is **currently partnered** with ***Innovative Resource Recovery "focusing on enhanced production of renewable natural gas"*** among other things. They're currently running Municipal Solid Waste (MSW) through their equipment for testing with DEP approval.

> *"The objective of these trials was to assess equipment performance and procure samples that are being used to evaluate gas production potential and refine the system design of the planned **anaerobic digestion** system."'*
> https://www.mrcmaine.org/wp-content/uploads/2024/03/MWS-update-to-higher-authority-03-2024.pdf
> (See Attached PDF "*MWS-update-to-higher-authority-03-2024*")

MRC has contracts with 115 communities which are prohibited from using any other waste disposal services. **During the 4+ years of development and incapacity,** their former ***Coastal Resources*** facility, run by **Fiberight, only operated for 6 months** after millions of dollars of investment. The facility has been **closed since May 2020**.
(Search results chronicling the rise and fall of Coastal Resources
https://duckduckgo.com/?t=ffab&q=Fiberight&ia=web)

Currently the MRC **does not have any waste diversion efforts in place** but do allow their member communities to divert waste on their own and do not penalize them for shorting their contracted amount of **MSW** that they **pay the MRC to send to Juniper Ridge**.

The MRC benefits from expanding JRL capacity since they **plan to use landfill** in their **future plans**. In the attached PDF the MRC discusses using their residuals as Alternate Daily Cover which will save them money on tipping fees.

> (Emphasis mine)
> *"**Landfill Disposal**: Outflow **MRF** (Materials Recovery Facility) **streams that are contaminated and cannot be further processed or sold are disposed at landfills** as a **Residual**. However, ~**50% of the total landfill disposal meets characterization of an ADC** and can be **tipped at a lower price** since used for landfill topping/capping."*
>
> *"**Additional Landfill Disposal**: **Residual** streams generated from the **anaerobic digestion** process that is **sent to** the **landfill**. Deal Team continues to diligence the **SRF** (*Sustainable Refuse-derived Fuel*) market/tech to identify regional demand.*
>
> ***If** the **SRF** process **is inactive**, which is applicable in the Stress Case, the **respective stream diverted to landfill**."*

(See Attached PDF "***MWS-update-to-higher-authority-03-2024***")

➢ *Eagle Point Energy Center*

The former ***Penobscot Energy Recovery Company (PERC)*** plant is now ***Eagle Point Energy Center* (*EPEC*)** partnering with their host city of Orrington with plans to be **online by 2025**.

Currently all MSW from Orrington goes directly to JRL.

Orrington does not offer any waste diversion. However, on their website they state that their **residents are encouraged to 'practice' recycling** by putting their items out by the curb: https://orrington.govoffice.com/solidwaste

> (Emphasis mine)
> *"Please note that at this time **we are not participating in the recycling program due to cost increase**. You may continue to put your recycling items curbside as you always have, and they will continue to be picked up.*
>
> *However **the items will not be RECYCLED, they will be taken to the PERC facility for incineration.***
>
> *Should the cost for participating in the recycling program align with our budget, we will inform you at that time. **Continuing to place your items in a recycling container can assist you in several ways**; more room in your household trash with less bulky items, maintaining the practice should recycling resume, etc."*

This **information** is **outdated** since the **PERC** plant **closed** in **May 2023**.
All **Orrington 'recycling' is sent to JRL**.

Since PERC ceased operations in May 2023, **there is still over 8,000 tons of unprocessed MSW left on the tipping room floor** constituting an enormous health and safety hazard. There have been at least two fires from spontaneous combustion and the site is overrun with rats.

It's estimated to **cost $1,000,000 to landfill** this backlog of waste.

EPEC was **recently granted $650,000 from Penobscot County's** discretionary funds from federal funds **to help purchase a baler** to clear the tipping room floor **to make repairs**. EPEC will supply an additional **$300,000** for the purchase. **Status is unclear**.

EPEC benefits from a landfill expansion because **JRL** provides them with **an easy disposal site without** having to incur the expense of **restarting** the **Waste to Energy** facility **which has been put on hold indefinitely.**

Easy landfill disposal does not benefit the general public since JRL's capacity is being eaten up by a loophole in the Chapter 400 Rules regarding 'bypass':

➢ *Redefining Bypass*

The **MSW sent to JRL** by the **MRC and EPEC** is **classified** as **'bypass'**. However, since both **facilities are not in operation**, and haven't been for some time, the **'bypass' classification is inaccurate** and their waste **should be reclassified as 'unprocessed MSW'** which, according to the rules, is **not allowed at JRL**.

Just recently **EPEC has applied** to the DEP **to be a transfer station sending MSW directly to JRL:**

> (Emphasis mine)
> ***Orrington facility to begin accepting trash, but not yet producing energy***
> https://www.bangordailynews.com/2024/08/20/bangor/bangor-environment/orrington-maine-perc-trash-accepting-restart/
>
> > *"**Eagle Point Energy Center** …spokesperson Dan Cashman said the company **has submitted a transfer station permit application** …that will allow the plant **to begin accepting waste**.*
> >
> > ***If** the transfer station application is **approved**, the company will then **transport** the **waste** to the **Juniper Ridge Landfill**. Cashman said the **waste-to-energy production won't begin until a later date**."*

EPEC should not be allowed to send unprocessed MSW to JRL as bypass.

The **WtE** side of the facility **is inoperable** and ***not simply down for repairs***.
New standards on Air Quality regulations may **make re-opening the incinerator** even more **prohibitively expensive**.

> **(CAA Permitting in EPA's New England Region** https://www.epa.gov/caa-permitting/caa-permitting-epas-new-england-region)

A transfer station is not the same as a **MRF** (Materials Recovery Facility) and **should not qualify for bypass** for any reason.

Since the **closure of PERC** in **May 2023,** and the **closure** of the MRC's **Coastal Resources** facility in **2020,** their **MSW going to JRL** is **designated** as **'bypass' caused by "temporary shutdowns"**.

I asked DEP's **JRL project manager Karen Knutti** what the **time limit is for bypass** due to **"temporary shutdowns"**. She replied:

> (Emphasis mine)
> ***"There is no time limit for bypass****; the law* ***defines bypass*** *as "any solid waste that is destined for disposal, processing, or beneficial use at an* ***operating solid waste facility*** *but* ***that cannot*** *be* ***disposed*** *of,* ***processed****, or* ***beneficially used*** *at that facility* ***because of*** *the facility's* ***temporary*** *malfunction,* ***temporary*** *insufficient capacity,* ***temporary*** *inability to burn or* ***temporary*** *downtime. For the purposes of this subsection, "****operating solid waste facility" means a licensed solid waste facility that is fully operational at the time that the malfunction****, insufficient capacity, inability to process or burn or downtime* ***begins*** *and that* ***intends*** ***to*** ***resume full operation*** ***at the time*** ***that the*** ***malfunction****, insufficient capacity, inability to process or burn or downtime* ***ends****."*

The designator '**temporary' needs clarification** since **there is no control in how long a facility can avoid processing MSW** and take advantage of this **loophole** that **allows unlimited, unprocessed MSW disposal at JRL**.

In the ***PBD Additional Information Request (PBD AIR)*** the DEP asked CWS to **explain the increase in unprocessed MSW 'bypass'** going to JRL:

> (Emphasis mine)
> #5
> *"It would be* ***helpful to show the amount of bypass from each facility*** *as it is the Department's understanding that while PERC contributed a significant portion of this MSW bypass disposed at JRL,* ***the amount of MSW bypass*** *from* ***ecomaine*** *also* ***increased*** *during 2022, and that bypass from* ***MMWAC*** *was not received at JRL prior to 2022*."

Establishing a time limit for MSW designated as 'bypass' would greatly reduce the volume of unprocessed MSW going to JRL by **closing a loophole solid waste facilities are exploiting and encourage waste diversion as an alternative**.

If the **MRC, ecomaine, MMWAC and EPEC** can no longer process the amount of MSW they receive, then they **should use commercial landfills** or **consider expansions on their facilities rather than expecting JRL to pick up the overload**.

➢ MRC Swap Agreement

Currently both MRC member communities and Orrington send all of their MSW, and some recycling, directly to Juniper Ridge Landfill. The MRC group has contracted with CWS to **offset half of their quota by sending 50%** of MSW created by towns closer to Norridgewock **to Crossroads** when it would **normally** go to **JRL**.

Both the MRC, and CWS save on transportation costs using this arrangement since JRL is closer to the MWS Hampden facility, but **there seems to be a discrepancy in actual percentages between the two landfills** according to the DEP's ***07-30-24 JRL PBD Additional Information Request*** (Pg 1 Item 3)***:***

> (Emphasis mine)
> *#3.*
> *"Based on MRC's 2023 Annual Report, about **67%** of MRC-contracted community MSW is **destined for disposal at JRL** while the **Crossroads Landfill receives about 31%.**"*
> *(See Attached JRL PBD AIR SME response)*

In an email reply I sent to **Karen Knutti** regarding **answers SME supplied** to the DEP AIR:

> *"SME responses only clarify the rules but do not directly answer the questions asked.*
> *I haven't even finished reading this document and have found **multiple inconsistencies** in SME's responses.*
>
> *For instance, the question of **bypass, SME does not specifically address the discrepancy** of **67% vs 31 %** on an **equitable swap agreement** **(pg 17)** but merely **refers us back to the agreement which vaguely mentions "equivalent tonnage"** with convoluted exclusions:*
> *(See Attached JRL PBD AIR)*
>
> > (Emphasis and formatting for clarity mine)
> > *"**Swap Tonnage**: means **tonnage subject to a waste swap arrangement** pursuant to which:*
> >
> > > ***(a) Bypass MSW** waste generated in Maine from **MWS customers**, primarily within the **greater Bangor area**, is **delivered** to Juniper Ridge Landfill ("**JRL**") **rather than** being delivered to the Crossroads Landfill ("**Crossroads**") ("Diverted Waste"), **provided***

> ***that Diverted Waste shall specifically exclude commercial MSW*** *and* ***non-MWS contracted residential MSW****:*
>
> *(i) collected by Pine Tree;*
>
> ***or***
>
> *(ii) that is the subject of a contract between MWS and Pine Tree and its affiliates for disposal and/or processing;*
>
> ***and***
>
> *(b)* ***equivalent tonnage of MSW*** *originating in Maine* ***that otherwise would be delivered*** *by Pine Tree* ***to JRL is instead delivered*** *by Pine Tree* ***to Crossroads*** *("Replacement Waste");*
>
> ***and***
>
> *(c)* ***for which Diverted Waste, Innovative and MWS shall pay directly to Crossroads*** *amounts equivalent to* ***the (unknown) Crossroads tipping fee*** *as if such Diverted Waste had been delivered to Crossroads, and for which the Innovative and MWS shall pay Pine Tree a delivery fee of $****?*** *ton for Swap Tonnage to Crossroads."*

> *If I read this correctly,* ***Crossroads gets all the*** *(I would assume higher)* ***tipping fees and JRL gets 67% of all bypass with no financial compensation?****"*

The public does not benefit from this arrangement since it **eats up precious state-owned landfill space** simply **to save** profit-driven companies **transportation costs** of **MSW under the guise of 'bypass'.**

Setting a time limit on bypass designation would **divert** the MRC and EPEC's disposal of **unprocessed MSW** from JRL, **eliminating 116 + communities' waste, extending capacity at JRL without expansion.**

Perhaps **disallowing endless 'bypass' disposal** would **lend a sense of urgency** to the MRC and EPEC **to get up to speed on their waste diversion and reduction plans.**

➢ *The Jay Landfill and Waste Water Treatment Plant*

The mill facility in Jay has new owners and they want to **donate** the adjoining **landfill** to the **state** of Maine.

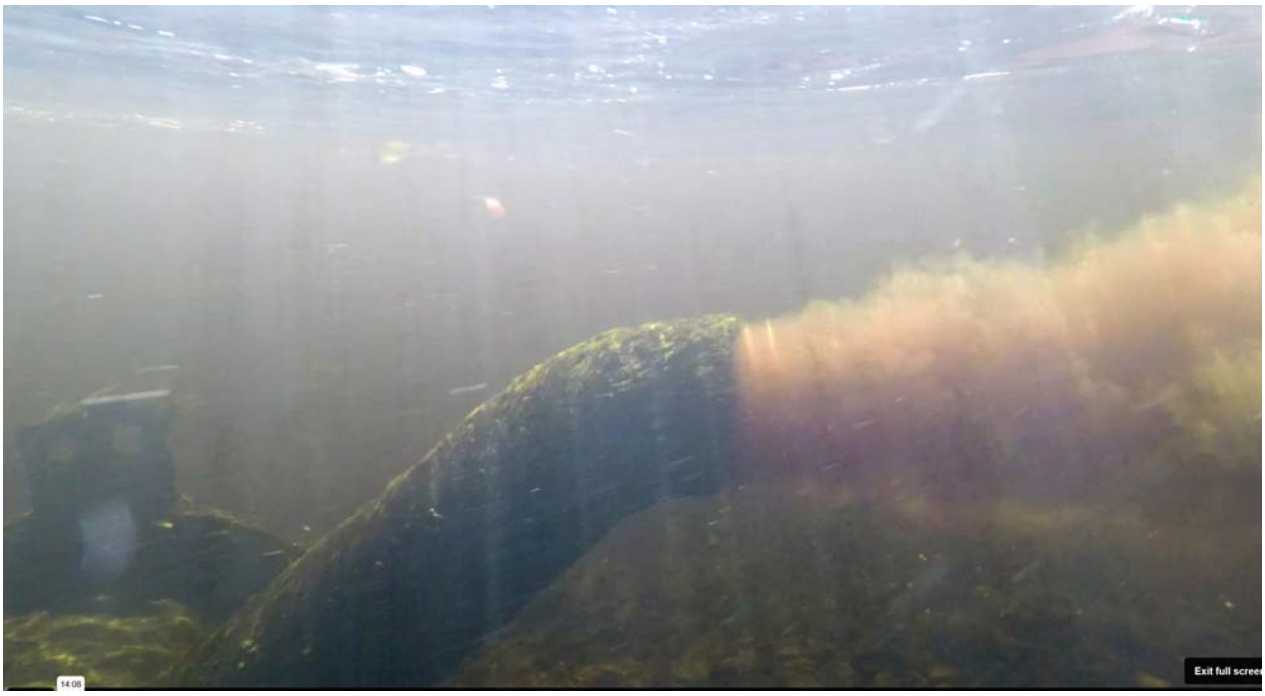
In the **amended version of LD 2135** the ENR committee **directed the Department of Environmental Protection** to **do an assessment** (Due on or before **January 1, 2025**) on the **potential benefits of using** the **Jay** facility as a potential **wastewater sludge containment** and **treatment** facility.

There is also a **wastewater treatment plant on site** for the **possible removal of PFAS** contaminants from landfill **leachate**.
The **estimated capacity of** the **Jay** landfill **is approximately equivalent** to the **proposed expansion of JRL**.
The ENR Committee left the door open for **possible MSW disposal at Jay**. However, simply adding more landfill capacity for unprocessed MSW avoids addressing the problem of JRL's early demise.

The anticipated capacity of Jay is based on current disposal rates which may drop as more waste diversion efforts become available.
(See ENR recording ENR Committee meeting regarding ***LD 2135 Amended version***
February 8, 2024 - 1:00:00-05:00 p.m.
https://legislature.maine.gov/audio/#216?event=90594&startDate=2024-02-08)

Size is important when determining landfill value. **The 'strategy' of a single huge landfill versus multiple, regional, smaller, municipality owned landfills, works against the state's waste hierarchy by creating an enormous toxic footprint that is unmanageable**. Better to expand existing, publicly owned, licensed facilities to diffuse the environmental impact statewide.

It is **not to the public's benefit** nor does it serve **Environmental Justice** to expect the **local communities surrounding JRL** to **bear the burden** of an **entire state's waste**.



ND Paper in Old Town WWTP discharge pipe in the Penobscot River **less than a mile below Indian Island, home of the Penobscot Nation**
(Sunlight Media Collective – *"Juniper Ridge Landfill Megadump Part 1"* https://vimeo.com/462000760)
ND is used for **JRL leachate** disposal.

➢ *Anaerobic Digestion (AD)*

Food Waste makes up about 30-40% of waste going to landfill which contributes considerably to methane gas production and accelerates climate change.

Municipal solid waste (MSW) **landfills are the third-largest source of human-related methane emissions in the United States**, accounting for approximately **14.4 percent** of these emissions in **2022**. https://www.epa.gov/lmop/basic-information-about-landfill-gas

According to renowned **glaciologist Paul Mayewski**, who directs the **University of Maine's Climate Change Institute**:

> (Emphasis mine)
> *"**Greenhouse gasses increased over the last few decades by 50 percent more than** it had ever been in **the rest of the last million years**, and **100 times faster**," he told me this week. "All of a sudden, because of our emissions, this whole thing was really **fast forwarded**."*
> https://themainemonitor.bluelena.io/index.php?action=social&chash=c24cd76e1ce41366a4bbe8a49b02a028.221&s=b97790973a7cfb5fe8f05800f777f6d6

Currently there are **few efforts diverting organics from landfill** although more are being **developed** and **utilized** at a **rapid rate**. Recent legislation (LD 1009,) **mandates commercial food producers eliminate food waste** from their **waste stream**.

> (Emphasis mine)
> *"The bill requires Maine to **roll out its ban slowly**, **starting in 2026** with those generating **2 tons of food waste a week within 20 miles of an organics recycler**. In **2028**, DEP would broaden who must follow the law to **include 1-ton** food waste producers located **within 25 miles** of a recycler."*
> https://www.pressherald.com/2024/02/28/maine-house-approves-food-waste-recycling-mandate/

Studies show **residential food waste is the largest contributor to this problem**.
It is obvious that **Maine needs more food waste diversion solutions**.
Yet **Maine is the last state in New England** to have a food waste law in place.

Easy disposal at JRL has **contributed to this lack of urgency** which **is not to the public's benefit. Expanding capacity** at JRL **does nothing to address this problem**.

In addition to LD1009 and the MRC's MWS facility, other **AD efforts are underway**:

> (Emphasis mine)
> ***This Maine farm converts truckloads of food waste to electricity. It still could be taking more***
> > *"About a decade ago, a fifth-generation dairy farm in Penobscot County installed a system for managing the vast piles of manure produced by its 1,000 cows. By loading the manure into large, heated tanks filled with*

> *microbes, they could* ***generate electricity using a technique called anaerobic digestion.”***
> https://www.mainepublic.org/business-and-economy/2022-07-21/this-maine-farm-converts-truckloads-of-food-waste-to-electricity-it-still-could-be-taking-more
>
> https://www.bangordailynews.com/2022/07/21/business/exeter-farm-food-waste-energy/

Expansion of midcoast energy facility could lessen Maine’s use of landfills

> https://www.bangordailynews.com/2024/07/15/midcoast/expansion-of-midcoast-energy-facility-could-lessen-maines-landfill-use-joam40zk0w/
>
> *“Last spring, a firm called* ***Viridi Energy*** *bought the* ***anaerobic digester*** *in Brunswick Landing, which for almost a* ***decade*** *has* ***created energy*** *out of organic waste,* ***such as the solid material that’s removed from sewage at wastewater treatment plants****.*
>
> *Now,* ***Casella says the bio-digestion process*** *in Brunswick* ***could reduce the volume of a sludge delivery by nearly 90 percent****, for example* ***shrinking 85,000 wet tons to 10,000****.*
>
> *There is growing urgency for Maine to reduce how much waste it sends to landfills, in part because* ***two other facilities in Orrington (EPEC) and Hampden (MWS) that are meant to turn trash into different forms of energy are in varying stages of closure or reopening****.”*

In their **PBD AIR** to Casella the DEP address **waste water treatment sludge**:

> (Emphasis mine)
> *#2.*
> *Maine Regional Conversion Facility, LLC is constructing a* ***200 wet tons per day sludge dewatering facility in Norridgewock****.*
> *The facility is expected to be* ***operational by late 2025****.*
>
> *Additionally, it is our understanding that Casella Waste Systems (****CWS****) is* ***partnering with Viridi Energy*** *to reopen and expand an anaerobic digester facility in Brunswick which could* ***reduce the volume of sludge delivery to JRL by 90 percent.”***

Also mentioned in the PBD AIR a **WWTP sludge drying facility in Norridgewock** is soon to be operational which **would further reduce the amount of bio-solids** disposed of at JRL:

> (Emphasis mine)
> *“… Maine Regional Conversion Facility, LLC is* ***constructing a 200 wet tons per day sludge dewatering facility*** *in* ***Norridgewock****.*
> *The facility is expected to be* ***operational by late 2025****.”*

Eliminating bio-solids by 90% and other organics from the waste stream, as well as the out-of-state bulky waste presumably needed to stabilize sludge and organics, will **extend JRL capacity without expansion**.

➢ *Air Quality*

Juniper Ridge Air Toxics Monitoring Project
https://www.maine.gov/dep/air/monitoring/juniper-ridge-monitor.html

(Emphasis mine)
"The Juniper Ridge Landfill** in Old Town Maine, operated by Casella Waste Systems has been the **source of air quality complaints for many years.

*As part of normal landfill operations, organic matter in the landfills will decompose, creating '**landfill gas' that escapes the landfill and travels downwind.***

*This landfill gas may contain many different gases. **Typically, over 90% of this gas being the odorless methane and carbon dioxide compounds**.*

Landfill gas also contains hydrogen sulfide** (H2S), which is a colorless gas, with even just trace amounts having the characteristic **foul odor of rotten eggs.

*In **May of 2023, a fire at the Juniper Ridge Landfill sparked additional concerns** about the landfill by the public. **Many citizens were concerned about the quality of their air and requested that the DEP initiate its own air quality sampling in the area**, independent of the H2S monitoring already being conducted by Casella Waste Systems.*

*The State developed **Ambient Air Guidelines (AAGs)** for hydrogen sulfide and other **Hazardous Air Pollutants1 (HAPs)**, which are set at a concentration for each chemical below which there is a minimal health risk.*

*The **objective** of the Maine DEP is to **obtain air quality data** in the **vicinity** of **Juniper Ridge Landfill** for **comparison** against the **AAGs** for a **health risk assessment**."*

Status of DEP Air Monitoring

***Phase 1** – Initial deployment (**Current Stage**)*

In **November of 2023**, the Department installed a HAPs sampler to begin collection of VOCs samples.

Volatile Organic Compounds (VOC) are released from products disposed of in landfills.

Volatile Organic Compounds (VOC) Impact on Indoor Air Quality
https://www.**epa.gov**/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality

(Emphasis mine)
"Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids. ***VOC's include a variety of chemicals, some of which may have short- and long-term adverse health effects****."*

The Department **acquired** an **AROMA-TOX** instrument in **January 2024**; however, this type of instrumentation is **new to the Department** and **staff training and instrument testing will have to be conducted prior to field deployment** to ensure that all data produced by this effort is of the highest possible quality.

The **AROMA-TOX** will be **deployed for at least 1-year** to produce an **annual average**.

It is premature to approve expansion of JRL without accurate air quality testing of the existing site before expansion.

➢ *Reports required by the ENR committee due on or before January 1, 2025*

Casella Operating Services Agreement* (OSA) *Extension Negotiations

The Operating Services Agreement with Casella as JRL operator is due to expire in 2034. Casella is requesting an additional 6 years added to their current OSA **extending their management of JRL for another 16 years**.

According to BGS Director Bill Longfellow: *"**CWS** wants an extension of their **OSA until 2030**, an **additional 6 years**, **before investing** the **resources required** for the **JRL expansion**"***.***

In 2022 the **Chapter 400 rules were changed to better define "Maine generated waste"** banning Out-of-State (OoS) waste from being dumped on JRL.

Casella **asked for and received a deferment** of the ban **until January 2023**.

In **January 2023** the **PFAS** contaminated **WWTP Sludge crisis hit** and Casella threatened to dump bio-solids into the Penobscot River, essentially holding the state hostage, until **CSW** was **granted permission** to continue **importing oversized bulky waste/Construction and Demolition Debris (CDD)**.

Again, the **state extended Casella's exemption allowing tens of thousands of tons of out-of-state waste into JRL to stabilize the landfill until 2026**.

CSW self reports and there is **no transparency** of **JRL operations** so the **state** is **in the dark** about **how much money Casella collects** for access to a state-owned landfill, or **with whom they contract**.

So, if the **OSA extension is denied then the expansion will not go forward**. If the **application for expansion is denied,** it is **unclear** what will happen with **CWS' OSA** if landfill capacity at JRL is **prematurely exhausted by 2028 as predicted**.

Once again **CWS** is using an alleged, perhaps contrived, '**crisis'** to **coerce the state** into action **before all information is reviewed**. And, (as they did in the original OSA and later the sludge crisis) **leverage the state into another contract heavily weighted in CWS's favor**.
(February 8th ENR meeting recording 1:36:10)

What the state is now asking in an amended contract with CWS sheds light on what's been missing for the last 20 years from the original, ill-designed 30 year contract. *(See attached LD 2135 amended*)

The state wants transparency in the operations of JRL and more oversight but there is **no guarantee that CWS won't continue to operate as usual,** with **fewer waste diversion services** in place, or find a workaround to **continue lucrative importation of out-of-state waste.**

Casella's **decline of waste diversion services** in the **JRL area**, and **making waste diversion services more expensive and complicated** than landfill, **deters participation** by communities and residents **resulting in the opposite of the state's waste hierarchy** being followed.

Extending CWS's OSA is not to the public's benefit.

JRL's remaining capacity estimate is based on current rates of disposal. If those rates diminish, because of other diversion and reduction efforts, **this estimate could be altered to allow at least 10 more years of capacity without an expansion** which **meets the criteria for long term capacity.**
(See Attached *Juniper Ridge Landfill PBD application public meeting handout)*

The public cannot be expected to adequately make a determination until:

- A **Materials Management Task Force** 2 year progress report
- MWS and EPEC **predicted startups in 2025 are operational** or **not**
- **Sludge and organic diversion** efforts are effectively **working** or **not**
- DEP, BGS and DFAS **required reports** on Jay and CWS OSA (due on or before **January 1, 2025**) are **submitted and analyzed**

- **Air quality testing results are made available and analyzed**, no sooner than **November 2025**
- **SME's response to the DEP's PBD** Application **Additional Information Request** is evaluated
- **132nd Legislative Session begins**, when new ENR committee members are briefed on the situation
- Other contributing factors such as **Chapter 400 rule changes** to **close** the **loophole** of an **open-ended time limit** for '**temporary bypass'** and **legislation recommended by DEP** has been processed through **work sessions** and **public hearings**

Only *after* these factors are taken into consideration can the DEP, the public and legislators make an informed decision on a JRL expansion and CSW OSA amendment and extension.

It is **premature for the public to weigh in on the public benefit of an expansion,** and OSA extension**, without** a comprehensive **understanding** of the **actual impacts** pending materials management efforts will have **on waste diversion and any remaining licensable capacity** at JRL.

➢ Conclusion

The DEP should deny the Public Benefit Determination Application for Juniper Ridge Expansion.

It is **backward thinking** to simply **expand JRL** for **MSW disposal.** It has become **easier, and cheaper**, to landfill in general which is **not to the state's benefit.**

By **adding** on **more capacity** to JRL the **state implies consent** for us **to continue** our **waste management practices** that have **proven ineffective over the last 50 years** since the **State's Waste Hierarchy** was **established in 1974.**

Any future determination should be tabled until 2026 when the DEP, BGS and DFAS **reports** have been **assessed** and any **waste diversion impacts** on JRL **evaluated**. **Only then can the true benefit to the public be decided and enacted upon by the 132nd legislative session.**

We cannot allow CWS's *self-inflicted* crisis (by **importing OoS waste** and **soliciting for more waste** [from WWTP plants and Wolfden mining]) **surrounding JRL to determine the next 16 years of doing business with Casella**. Reacting to **the crisis of losing 300 jobs at the paper mill in Old Town** is what got us into a **30 year one-sided contract with CWS**.

Those jobs were lost anyway within three years in spite of the state's efforts, but that hasty decision **ensnared us into a 30 year bargain** that **does not benefit the public except to enable easy waste disposal** with **no regard to the environmental impacts, the effects on the surrounding communities** or **planning for the future of materials management.**

Loose regulation surrounding waste management **has allowed mismanagement of a landfill that** was supposed to last indefinitely but **is predicted to end in less than 25 total years of use**. We need to **tighten the rules surrounding bypass** and other workarounds that **perpetuate landfill as a solution**.

Expanding JRL is not the answer. **Expanding local publicly owned and operated waste management,** with **higher administration costs** added to tipping fees **funding local mandatory waste diversion efforts,** might get us started on the right track.

We need to make landfill the most expensive option in materials management.

For the sake of Environmental Justice for the local residents who suffer from the looming toxic presence of Juniper Ridge Landfill, who find little support from our elected officials and state administration, **let's take a pause and table any decisions regarding JRL until 2026** when we may have clearer answers to our questions.

Let's use this time to **do it right for once** and **not just "buy time**".

It is too soon to ask the public to weigh-in on a public benefit determination application.

Waiting until 2026, when the state and the public have had a chance to **evaluate new waste diversion efforts, technologies, reports, test results and a new legislative session begins,** allows the public enough time to fully evaluate the issues that were brought forth in Representative Dill's original emergency resolve.

Please use this time to consider all the **empirical evidence surrounding** our **failure** to **accomplish our waste diversion goals** and effectively determine **if we really need to expand landfill capacity** or **support waste diversion solutions already in play** which may, hopefully, make additional **expansions unnecessary**.

We must do better

Kat Taylor
Argyle Twp.

Attachments:

Original ***H.P. 1359, L.D. 2135, "Resolve, to Investigate and Address Municipal Solid Waste Disposal Services Issues***"

Amended ***H.P. 1359, L.D. 2135, "Resolve, Regarding the Operation and Future Capacity of State-owned Landfills"***

DEP ***"Juniper Ridge Landfill PBD application public meeting handout"***

DEP **"*2024_07_30 JRL PBD additional information request*" with SME response annotated**

MRC **"*MWS-update-to-higher-authority-03-2024*"**

Sevee & Maher Engineers (hired by CSW) **PPT presentation (annotated)**

Videos:

Excellent video by the *Sunlight Media Collective* (who presented public comments at the JRL PBD Application Meeting on July 16, 2024) on how **Juniper Ridge Landfill was misused by CWS by importing out-of-state waste creating the self-inflicted 'crisis' we see today.** JRL has always been a cash cow for Casella who used the state-owned landfill to import waste from other states that have already banned landfill as a solution.

Sunlight Media Collective
Juniper Ridge Landfill Megadump Part 1
https://vimeo.com/462000760
4 years ago

Sunlight Media Collective
Leachate and Landfill Gas: Juniper Ridge Landfill Mini Lecture by Hillary Lister
Sep 13, 2020
https://vimeo.com/457608974

Sunlight Media Collective
Disparity of State Regulations: Juniper Ridge Landfill Mini Lecture by Hillary Lister
3 years ago
https://vimeo.com/457589756

ENR Committee meetings regarding LD 2135
All the information on LD2135 under one roof:
https://legislature.maine.gov/billtracker/#Paper/HP1359?legislature=131

January 31st LD 2135 work session begins at: **2h54m**
February 8th LD 2135 work session begins at: **1h52m**

Public Meeting Juniper Ridge Landfill Public Benefit Determination Application
All meeting materials, public comments and links to video:
https://www.maine.gov/dep/waste/juniperridge/index.html

131st MAINE LEGISLATURE

SECOND REGULAR SESSION-2024

Legislative Document **No. 2135**

H.P. 1359 House of Representatives, January 3, 2024

Resolve, to Investigate and Address Municipal Solid Waste Disposal Services Issues

(EMERGENCY)

Approved for introduction by a majority of the Legislative Council pursuant to Joint Rule 203.

Reference to the Committee on Environment and Natural Resources suggested and ordered printed.

ROBERT B. HUNT
Clerk

Presented by Representative DILL of Old Town.
Cosponsored by Representatives: BRIDGEO of Augusta, CAMPBELL of Orrington, CYRWAY of Albion, MILLIKEN of Blue Hill, MORIARTY of Cumberland, OSHER of Orono.

Emergency preamble. Whereas, acts and resolves of the Legislature do not become effective until 90 days after adjournment unless enacted as emergencies; and

Whereas, the Maine Revised Statutes, Title 38, section 1305, subsection 1 mandates that "Each municipality shall provide solid waste disposal services for domestic and commercial solid waste generated within the municipality and may provide these services for industrial wastes and sewage treatment plant sludge"; and

Whereas, in the State, 115 municipalities have entered into contracts with the Municipal Review Committee to satisfy this mandate through provision of municipal solid waste handling, processing and disposal services at the Municipal Review Committee's recycling and anaerobic digestion facility in the Town of Hampden now known as Coastal Resources of Maine and approximately 44 municipalities have entered into contracts with Penobscot Energy Recovery Company to satisfy this mandate through provision of municipal solid waste processing and disposal services at Penobscot Energy Recovery Company's waste-to-energy facility in the Town of Orrington; and

Whereas, the Municipal Review Committee has been unable to provide municipal solid waste handling, processing and disposal services at the Coastal Resources of Maine recycling and anaerobic digestion facility since its closure on May 28, 2020; and

Whereas, Penobscot Energy Recovery Company ceased to provide municipal solid waste handling, processing and disposal services at its waste-to-energy facility as of May 2, 2023, and the auction of Penobscot Energy Recovery Company's waste-to-energy facility, which could lead to it being sold for scrap, is imminent; and

Whereas, as required by their solid waste disposal facility licenses issued by the Department of Environmental Protection, municipal solid waste from these 159 municipalities has been and is being disposed of primarily at the state-owned Juniper Ridge Landfill located almost entirely in the City of Old Town with a portion of the landfill right-of-way access located in the Town of Alton; and

Whereas, the state-mandated curtailment of spreading wastewater treatment plant sludge on land because of the perfluoroalkyl and polyfluoroalkyl substances contamination has resulted in the disposal of some of this sludge at the Juniper Ridge Landfill; and

Whereas, land disposal of waste at a landfill is the least desirable solid waste disposal option under the State's solid waste management hierarchy under Title 38, section 2101; and

Whereas, the Department of Environmental Protection approved only a partial expansion of the Juniper Ridge Landfill in 2017, granting a license for 9.3 million cubic yards of capacity of the 22 million cubic yards that was available; and

Whereas, as a result of this temporary increase in disposal of municipal solid waste and wastewater treatment plant sludge at the Juniper Ridge Landfill, the partial expansion, which was expected to last through 2033, is now expected to use that capacity by 2028, thus necessitating another permitting process to complete the expansion; and

Whereas, the loss of municipal solid waste handling, processing and disposal services at the Coastal Resources of Maine facility and at the Penobscot Energy Recovery Company waste-to-energy facility and the increased rate of municipal solid waste and wastewater

At the current disposal rate of approx. 1m cu yds per year, **this expansion should have lasted at least 17 years**

treatment plant sludge disposal at the Juniper Ridge Landfill is creating a hardship for the City of Old Town and its residents, is placing stress on the 159 municipalities that have statutory obligations to provide municipal solid waste disposal services and is straining the resources of sewer and utility districts and departments, as well as consuming valuable and finite state-owned solid waste landfill resources that are supposed to be the last resort for solid waste disposal; and

Whereas, the Department of Administrative and Financial Services, Bureau of General Services is responsible for oversight and management of state-owned property, including the Juniper Ridge Landfill; and

Whereas, under Title 38, section 2122, the Department of Environmental Protection is required to "prepare an analysis of, and a plan for, the management, reduction and recycling of solid waste for the State. The plan must be based on the priorities and recycling goals established in sections 2101 and 2132. The plan must provide guidance and direction to municipalities in planning and implementing waste management and recycling programs at the state, regional and local levels" and to provide periodic updates of that plan; and

Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as immediately necessary for the preservation of the public peace, health and safety; now, therefore, be it

Sec. 1. Department of Administrative and Financial Services, Bureau of General Services and Department of Environmental Protection to report to Joint Standing Committee on Environment and Natural Resources. Resolved: That the Department of Administrative and Financial Services, Bureau of General Services and the Department of Environmental Protection shall meet with public and private solid waste management facility owners and operators and municipal and quasi-municipal officials to investigate and make recommendations in a written report to the Legislature on the existence and development of feasible potential short-term and long-term municipal solid waste disposal options, whether public, private or a mixture of both, for the approximately 159 municipalities with municipal solid waste disposal contracts with the Municipal Review Committee and with Penobscot Energy Recovery Company and wastewater treatment plant sludge disposal options for sewer and utility districts and departments, in order to address the issues facing municipalities and to ensure that the use of the state-owned Juniper Ridge Landfill is consistent with the Legislature's policy on solid waste management and the solid waste management hierarchy as set out in the Maine Revised Statutes, Title 38, section 2101. The Bureau of General Services and the Department of Environmental Protection shall conduct their investigation promptly to permit potential action by the 131st Legislature and shall submit a written report, with their recommendations, to the Joint Standing Committee on Environment and Natural Resources on or by April 1, 2024.

Emergency clause. In view of the emergency cited in the preamble, this legislation takes effect when approved.

SUMMARY

This resolve directs the Department of Administrative and Financial Services, Bureau of General Services and the Department of Environmental Protection to investigate and make recommendations by April 1, 2024 to the Joint Standing Committee on Environment and Natural Resources to address several critical issues and developments in the State's solid waste management system that affect approximately 159 municipalities in the central and northern areas of the State and sewer and utility districts and departments all across the State.

L.D. 2135

Date: (Filing No. H-)

ENVIRONMENT AND NATURAL RESOURCES

Reproduced and distributed under the direction of the Clerk of the House.

STATE OF MAINE

HOUSE OF REPRESENTATIVES

131ST LEGISLATURE

SECOND REGULAR SESSION

COMMITTEE AMENDMENT " " to H.P. 1359, L.D. 2135, "Resolve, to Investigate and Address Municipal Solid Waste Disposal Services Issues"

Amend the resolve by striking out the title and substituting the following:

'Resolve, Regarding the Operation and Future Capacity of State-owned Landfills'

Amend the resolve in the emergency preamble by striking out the 5th paragraph (page 1, lines 18 to 21 in L.D.) and inserting the following:

'**Whereas,** Penobscot Energy Recovery Company ceased to provide municipal solid waste handling, processing and disposal services at its waste-to-energy facility as of May 2, 2023 and, although the facility was sold at auction in November 2023, it has yet to resume operation; and'

Amend the resolve by striking out all of section 1 and inserting the following:

'**Sec. 1. Report on Jay landfill. Resolved:** That the Department of Environmental Protection shall evaluate the potential costs and benefits to the State of the State's acquiring ownership of the former paper mill landfill in the Town of Jay for the primary purpose of increasing disposal capacity in the State for wastewater treatment plant sludge and special waste but with consideration given to the potential for the disposal of municipal solid waste at that landfill. The evaluation must include, but is not limited to, consideration of existing conditions at the Jay landfill, including liner condition, leachate collection systems and the presence of perfluoroalkyl and polyfluoroalkyl substances and other environmental contaminants; capacity, including disposal capacity and the potential for expansion of capacity; facility needs in the areas of odor management, gas management and leachate management and treatment; options for managing wastewater treatment plant sludge; and any other conditions relevant to the potential future operation of a landfill. In conducting the evaluation under this section, the department may, as necessary, consult with the Department of Administrative and Financial Services, Bureau of General Services, referred to in this resolve as "the bureau."

On or before January 1, 2025, the department shall submit to the joint standing committee of the Legislature having jurisdiction over environment and natural resources matters a report outlining the findings and recommendations of the evaluation under this section and including any proposed legislation. After reviewing the report, the committee may report out legislation relating to the report to the 132nd Legislature in 2025.

Sec. 2. Report on Old Town landfill operating services agreement. Resolved: That the bureau and the Department of Environmental Protection shall evaluate options for amending the operating services agreement of February 5, 2004, as amended, between the bureau and the operator of the state-owned Juniper Ridge Landfill in the City of Old Town concerning the operation of the landfill for the purpose of enhancing the transparency and oversight of the operation of the landfill and of the related activities of the operator of the landfill.

On or before January 1, 2025, the bureau and the department shall jointly submit to the joint standing committee of the Legislature having jurisdiction over environment and natural resources matters a report outlining the findings and recommendations of the evaluation under this section and including any proposed legislation. After reviewing the report, the committee may report out legislation relating to the report to the 132nd Legislature in 2025.

Sec. 3. Amendment of operating services agreement for Old Town landfill. Resolved: That, in accordance with the provisions of this section, the bureau shall initiate a process to negotiate an amendment to the operating services agreement of February 5, 2004, as amended, referred to in this section as "the agreement," with the operator of the state-owned Juniper Ridge Landfill in the City of Old Town, referred to in this section as "the landfill," concerning the operation of the landfill.

1. Notwithstanding any provision of law or bureau rule to the contrary, the bureau may not execute any amendment to the agreement:

A. Prior to the bureau's submission to the Department of Environmental Protection of an application for a public benefit determination for a license for the expansion of the landfill in accordance with the Maine Revised Statutes, Title 38, section 1310-AA; and

B. Unless the amendment to the agreement includes the provisions described in subsection 2.

2. Subject to the limitation provided in subsection 1, paragraph A, the bureau shall negotiate with the operator of the landfill and execute an amendment to the agreement that:

A. Requires the operator to disclose and make available to the bureau the terms and conditions of all contracts and agreements between the operator and its contractors, subcontractors and customers regarding the use, operation and maintenance of the landfill;

B. Requires the operator to implement and operate at the landfill the technology, facilities or processes necessary to ensure that the leachate collected from the landfill is treated prior to discharge such that the concentration of regulated PFAS contaminants in the treated leachate does not exceed the drinking water standards applicable to community water systems and nontransient, noncommunity water systems established by the Department of Health and Human Services pursuant to the Maine Revised Statutes, Title 22, section 2611. The amendment may include

provisions that account for future amendments to applicable treatment standards for regulated PFAS contaminants, including, but not limited to:

(1) Future amendment by the Department of Health and Human Services pursuant to Title 22, section 2611 of the applicable drinking water standards for community water systems and nontransient, noncommunity water systems regarding the concentration of regulated PFAS contaminants; and

(2) Future establishment by the Department of Environmental Protection of effluent discharge standards applicable to the concentration of regulated PFAS contaminants in discharged effluent containing treated landfill leachate.

The amendment must provide the bureau with the authority, in consultation with the Department of Environmental Protection, to review, approve and monitor the operator's implementation and operation at the landfill of the perfluoroalkyl and polyfluoroalkyl substances treatment technology, facilities or processes required by this paragraph.

As used in this paragraph, "regulated PFAS contaminants" has the same meaning as in Title 22, section 2660-AA, subsection 4; "community water system" has the same meaning as in Title 22, section 2660-B, subsection 2; and "nontransient, noncommunity water system" means a nontransient, noncommunity water system as described in Title 22, section 2660-B, subsection 5, paragraph A; and

C. Includes other terms, conditions or changes to the agreement that are negotiated and agreed upon by the bureau and the operator.'

Amend the resolve by relettering or renumbering any nonconsecutive Part letter or section number to read consecutively.

SUMMARY

This amendment changes the title of the resolve and does the following.

1. It replaces the provisions of the resolve requiring an investigation with a requirement that the Department of Environmental Protection evaluate the potential costs and benefits to the State of the State's acquiring ownership of the former paper mill landfill in the Town of Jay for the primary purpose of increasing disposal capacity in the State for wastewater treatment plant sludge and special waste. On or before January 1, 2025, the department is required to submit to the joint standing committee of the Legislature having jurisdiction over environment and natural resources matters a report outlining the findings and recommendations of the evaluation and including any proposed legislation, and the committee may report out related legislation to the 132nd Legislature in 2025.

2. It requires the Department of Administrative and Financial Services, Bureau of General Services and the Department of Environmental Protection to evaluate options for amending the operating services agreement of February 5, 2004, as amended, between the bureau and the operator of the state-owned Juniper Ridge Landfill in the City of Old Town concerning the operation of the landfill for the purpose of enhancing the transparency and oversight of the operation of the landfill and of the activities of the operator of the landfill. On or before January 1, 2025, the bureau and the department are required to jointly submit to the joint standing committee of the Legislature having jurisdiction over environment and natural resources matters a report outlining the findings and recommendations of this

evaluation and including any proposed legislation. After reviewing the report, the committee may report out related legislation to the 132nd Legislature in 2025.

3. It requires the Department of Administrative and Financial Services, Bureau of General Services to initiate a process to negotiate an amendment to the operating services agreement of February 5, 2004, as amended, with the operator of the state-owned Juniper Ridge Landfill in the City of Old Town concerning the operation of the landfill. It prohibits the bureau from executing any amendment to that agreement prior to the bureau's submission of an application for a public benefit determination for a license for the expansion of the landfill in accordance with the Maine Revised Statutes, Title 38, section 1310-AA and unless the amendment to the agreement includes certain specified provisions. Those provisions include requirements that the operator disclose and make available to the bureau the terms and conditions of all contracts and agreements between the operator and its contractors, subcontractors and customers regarding the use, operation and maintenance of the landfill and requirements that the operator implement and operate at the landfill the technology, facilities or processes necessary to ensure that the leachate collected from the landfill is treated prior to discharge such that the concentration of regulated perfluoroalkyl and polyfluoroalkyl substances, or PFAS, contaminants in the treated leachate does not exceed specified standards.

FISCAL NOTE REQUIRED

(See attached)

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JANET T. MILLS
GOVERNOR

MELANIE LOYZIM
COMMISSIONER

Public Meeting Handout

Application for Public Benefit Determination
Juniper Ridge Landfill

The State of Maine, Department of Administrative and Financial Services, Bureau of General Services, has applied for a determination of public benefit for a proposed expansion of the State-owned Juniper Ridge Landfill. Before the Department can act upon an application for a proposed landfill expansion, the Commissioner must determine that the proposed expansion would provide a substantial public benefit. The proposed expansion would provide 11.9 million cubic yards and 11.3 years of disposal capacity. Juniper Ridge Landfill is operated for the State by Casella Waste Systems, Inc., under the terms of an operating services agreement.

Proposed expansion barely meets Long Term provision

The following provides some applicable excerpts from Chapter 400 of Maine's Solid Waste Management Rules pertaining to applications for public benefit determination.

400(5)(E). Standards for public benefit determination. The Commissioner shall find that a proposed solid waste disposal facility or expansion that is subject to the provisions of this section provides a substantial public benefit if it meets the following standards:

It is premature to provide public comment without the report ordered for the evaluation of the Jay landfill's suitability for waste water treatment sludge.
The Jay facility's current licensable **capacity is equal to the proposed expansion of JRL.**

(1) The facility meets immediate, short-term, or long-term capacity needs of the State. For purposes of this paragraph, immediate means within the next 3 years, "short term" means within the next 5 years, and "long term" means within the next 10 years. When evaluating whether a proposed facility meets the capacity needs of the State, the commissioner shall consider relevant local and regional needs as appropriate and the regional nature of the development and use of disposal capacity due to transportation distances and other factors;

(2) Except for expansion of a commercial solid waste disposal facility that accepts only special waste for landfilling, the facility is consistent with the State Waste Management and Recycling Plan and promotes the Solid Waste Management Hierarchy as set out in 38 M.R.S.A. § 2101;

(3) The facility is not inconsistent with local, regional, or state waste collection, storage, transportation, processing, or disposal; and

(4) The facility is not inconsistent with ensuring environmental justice for the community in which the facility is proposed.

400(4)(N) Solid Waste Management Hierarchy

In Old Town the host city

(1) **Standards.** The purpose and practices of the solid waste facility must be consistent with the State's solid waste management hierarchy set forth in 38 M.R.S.A. § 2101, which establishes that it is the policy of the State to actively promote and encourage waste reduction measures and the maximization of waste

diversion efforts, and which sets forth an integrated approach to the management of solid waste generated in and imported to the State, based upon the following order of priority:

2-96 gal bins weekly pickup

(a) Reduction of waste generated at the source, including both the amount and toxicity of the waste;

No reuse options

(b) Reuse of the waste;

Too complicated/ unavailable

(c) Recycling of waste;

(d) Composting of biodegradable waste;

No composting or yard waste

(e) Waste processing that reduces the volume of waste needing land disposal; including incineration; and,

No incineration or anerobic digestion

Most used method

(f) Land disposal of waste.

(2) **Submissions.** The application must include evidence that affirmatively demonstrates that the purpose and practices of the solid waste facility are consistent with the solid waste management hierarchy including, but not limited to:

(a) **Solid waste disposal facility.** Notwithstanding the provisions of section 6 of this Chapter, evidence that demonstrates that the waste has been reduced, reused, recycled, composted, and/or processed to the maximum extent practicable prior to incineration or landfilling, in order to maximize the amount of material recycled and reused, and to minimize the amount of waste being disposed. Such evidence shall include, but is not limited to, a description of the reduction, reuse, recycling, composting and/or processing programs/efforts that the waste is or will be subject to, and that are sufficiently within the control of the applicant to manage or facilitate, including relevant metrics to evaluate effectiveness; and a description of ongoing efforts to increase the effectiveness of these programs/efforts.

No collection of recycling in areas adjacent to host communities. No programs for alternate waste diversion.
No local Oversized Bulky Waste pickup besides Old Town

For the purposes of this section, reducing, reusing, recycling, composting and/or processing waste to the "maximum extent practicable" prior to disposal means handling the greatest amount of waste possible through means as high on the solid waste management hierarchy as possible, resulting in maximizing waste diversion and minimizing the amount of waste disposed, without causing unreasonable increases in facility operating costs or unreasonable impacts on other aspects of the facility's operation. Determination of the "maximum extent practicable" includes consideration of the availability and cost of technologies and services, transportation and handling logistics, and overall costs that may be associated with various waste handling methods.

Minimal waste diversion maximize waste disposal.
Recycling is now more expensive than landfill.

400(1)(TT-1) Definition of Environmental Justice. "Environmental justice" means the right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment regardless of ancestry, class, disability, ethnicity, income, national origin, or religion. Environmental justice includes the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of waste management laws, regulations, and licensing decisions.

JRL is polluting the Penobscot River by discharging minimally treated leachate through the ND mill in Old Town. Residents suffer from noxious odors, debris from spontaneous fires of unknown origin and an ever growing eyesore that is JRL causing constant anxiety for local residents who fear collapse is imminent.

Web Links and Contact Information:

Maine DEP Juniper Ridge Landfill Website:
https://www.maine.gov/dep/waste/juniperridge/index.html

Department of Administrative and Financial Services, Bureau of General Services Juniper Ridge Landfill Website: https://www.maine.gov/dafs/bgs/maines-state-owned-landfills/juniper-ridge-landfill

Chapter 400 of the Solid Waste Management Rules:
https://www.maine.gov/sos/cec/rules/06/096/096c400.docx

January 2024 Maine Materials Management Plan:
https://www.maine.gov/tools/whatsnew/attach.php?id=12222463&an=1

Karen Knuuti, project manager, DEP, Bureau of Remediation and Waste Management
Email karen.knuuti@maine.gov
Telephone: 207-248-2409
Mailing address: DEP, 106 Hogan Road STE 6, Bangor, ME 04401

Municipal Review Committee, Inc.
ENSURING AFFORDABLE, LONG TERM, ENVIRONMENTALLY SOUND DISPOSAL OF MSW

March 13, 2024

RE: MWS Waste Processing Facility Update

Dear MRC Members,

We wanted to share a formal update on the ongoing efforts to reopen the Municipal Waste Solutions (MWS) facility in Hampden. Since establishing our partnership with Innovative Resource Recovery (Innovative) eight months ago, MWS has made substantial progress toward its redevelopment plan. Innovative is actively engineering a retrofit of the plant, focusing on enhanced production of renewable natural gas. Most recently, on January 1st, MWS received formal approval from the Maine Department of Environmental Protection (MDEP) to conduct weekly waste test runs. Since that approval, MWS has safely conducted multiple weekly system trials to obtain key data points that will further support the overall system design.

This campaign marks the second set of test runs, with the previous one conducted in July 2023 to ensure the operational readiness of equipment. Over the past nine weeks, small amounts of waste from various locations, including Bangor, Brewer, Orono, Eddington, Clifton, Carmel, and Hampden, have been brought into MWS for processing and testing. The objective of these trials was to assess equipment performance and procure samples that are being used to evaluate gas production potential and refine the system design of the planned anaerobic digestion system. no pollution controls in place

MWS utilized multiple technical consultants to facilitate these trials, including the University of Maine Process & Development Center, which supported the laboratory work required to properly conduct lab testing and the analyze results of the waste processing. Innovative on-site process engineer oversees all activities and manages the various third-party technical parties to advance the design of the waste processing equipment and anaerobic digestion system, as well as the regionally based technical-service providers MWS has engaged in the project, such as Mid-South Engineering of Orono and Haley Ward of Bangor.

In addition to the technical aspects, coordination with local gas utilities is underway to ensure the safe and reliable injection of Renewable Natural Gas (RNG) into the local distribution grid.

Municipal Review Committee, Inc.
ENSURING AFFORDABLE, LONG TERM, ENVIRONMENTALLY SOUND DISPOSAL OF MSW

The MRC acknowledges that the reopening of MWS will take time but is very pleased with the depth of expertise Innovative is bringing to bear on this project and the progress that it has made within such a short period of ownership. We commend the Innovative team for its transparency, direct approach, and financial stability. The MRC fully agrees with the Innovative approach and commitment to getting the project done correctly the first time. Their focus is on addressing plant bottlenecks, refining designs, and ensuring the long-term economic viability of the Hampden facility while diverting waste from landfills.

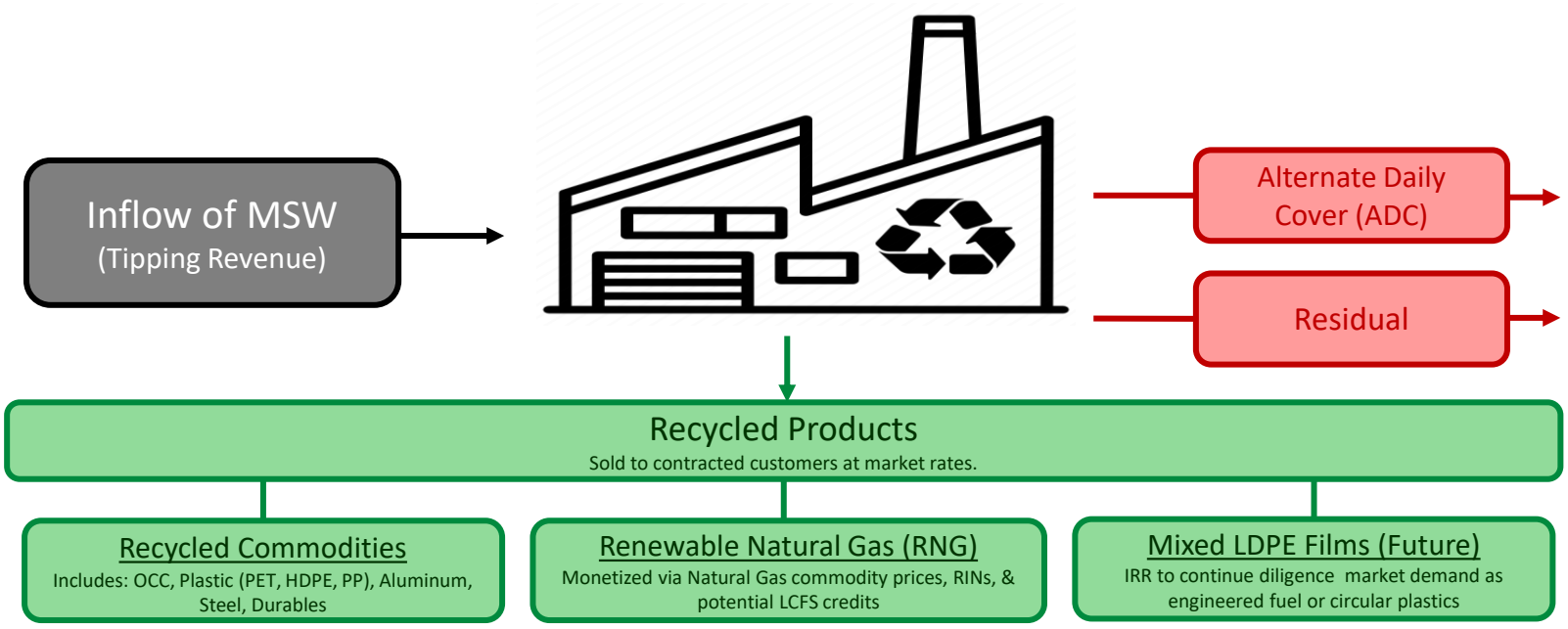
MRC is excited about our partnership and knows that together, we're positively impacting waste management, economic sustainability, and environmental stewardship. The reopening of this facility will not happen overnight, but it will happen.

Please share this MWS facility progress with your colleagues and should you have any questions, please do not hesitate to contact MRC Executive Director Michael Carroll at (207) 664-1700 or mcarroll@mrcmaine.org or a MRC Board Member.

Sincerely,

Michael Carroll
Executive Director

Process Overview



- An unfiltered stream of MSW is tipped on the facility floor, mostly comprising of unopened black trash bags. From there, the MRF processes and filters the waste, through several complex sorting techniques, into segregated streams that are then either sold as a recycled product, processed or disposed at a landfill.
- **Recycled Products**: i) Recycled Commodities: Homogenous streams, such as plastics and metals, are baled and sold to local/regional customers for further processing. ii) RNG: Two MRF outflow streams, dense wet paper and food waste, are sent through anaerobic digestion systems to generate biogas that is upgraded to natural gas quality and injected into the pipeline, and iii) Mixed LDPE Films: Films (plastic bags) can be sent through a densification process to make an engineered fuel or can be processed for circular plastics.
- **Landfill Disposal**: Outflow MRF streams that are contaminated and cannot be further processed or sold are disposed at landfills as a Residual. However, ~50% of the total landfill disposal meets characterization of an ADC and can be tipped at a lower price since used for landfill topping/capping.
- **Additional Landfill Disposal**: Residual streams generated from the anaerobic digestion process that is sent to the landfill. Deal Team continues to diligence the SRF market/tech to identify regional demand. If the SRF process is inactive, which is applicable in the Stress Case, the respective stream diverted to landfill.

Excerpts from 2024 Maine Materials Management Plan

While not intentional, JRL has in effect become Maine's fastest and most economical solution for handling emerging solid waste issues. Given the increasing quantities of wastes being landfilled at JRL, expansion of this landfill is a critical solution that will be necessary in addition to proactive steps to increase waste infrastructure options as well as enhancing efforts toward meeting statutory waste reduction, diversion, and recycling goals. Difficult decisions will need to be made about the overall purpose and use of this state-owned landfill, how to maximize its capacity and lifespan, whether to invest in alternative infrastructure for waste disposal at other locations, and how market pressures can be modified to encourage waste diversion programs.

D. Projected Demand for Capacity

Currently, there are significant gaps in Maine's Eastern Maine region for managing MSW. Investment activity[39] focused on restarting both the idled Orrington waste-to-energy incinerator and the Hampden solid waste processing facility are underway, but uncertainties remain with regard to, operating timeframes, financial barriers, and long-term capacity. Should either of these facilities begin operations, the concerns about how to cost effectively manage MSW in the region should ease. However, at the current time MSW is bypassing from both facilities going directly to landfills. JRL will likely continue to be the recipient of most of this MSW stream over the next few years as it is closest in proximity to the region impacted (logistics and transportation make this more cost effective). It should be mentioned that both of these facilities while currently operating do fall higher up on Maine's solid waste management hierarchy.

Low cost disposal is driving landfill collapse. If we truly want to divert waste from landfill, then it should be the **most expensive option.**

Statewide, other than the issue specific to Maine's Eastern Maine region, Maine appears to have adequate capacity for at least 10 years before several landfill facilities reach their capacity. This assumes however that an expansion license application is both received by and approved by the Department for the JRL facility. As of the date of this report, the Department has received a PIR from JRL for a future expansion.[40] The loss of JRL as a disposal facility would create catastrophic capacity issues as it receives over 50% of all material landfilled in Maine annually. If JRL moves forward with its application for an expansion, the projected capacity at current fill rates would most likely add an additional 15 to 20 years, which at the earliest brings it to being at capacity once again in 2042.

Even with capacity available statewide for the next 10 years, unless significant progress is made in ensuring that the state has existing or new infrastructure for waste processing and disposal, as well as enhancing waste diversion programs, landfill capacity will become an even more pressing issue in 15 years. For example:

- If the application for expansion for the Hatch Hill Landfill is approved, Hatch Hill will reach its estimated capacity in 12 to 15 years. This means that as early as 2035, Maine will lose approximately 50,000 tons of waste disposal capacity.

[39] The new operators taking over the Orrington waste-to-energy incinerator have renamed the facility, "Garbage Recycling and Clean Energy" or "GRACE" and plan to resume full operation of the facility. See: https://www.bangordailynews.com/2023/11/27/news/bangor/orrington-trash-incinerator-restart-operations-joam40zk0w/.

[40] In the past licensing for the JRL facility from start to finish has taken approximately six years.

- Crossroads Landfill is expected to reach the capacity of its recent expansion in 17 years, putting its operations until about 2040. This will substantially impact Maine's waste disposal capacity as this landfill accepts on average about 300,000 tons annually (although some of this comes from out-of-state).

- Bath Landfill is expected to reach capacity in 21 years, allowing its operations until 2044. The loss of the Bath Landfill will have a relatively minor impact to Maine's overall waste disposal capacity, as that landfill receives only approximately 12,000 tons of material annually.

- The loss of the Hatch Hill and Bath landfills, in particular, will impact disposal options for the Central Maine region in about 15-20 years.

As with all of these landfills, landfill operators can extend the life span of their landfill by turning away or not accepting wastes. This will pose additional challenges to generators of solid waste who may need to seek alternative disposal outlets which may be farther away and cost more to access. These costs likely will be passed on to municipalities in most cases, which in turn will pass costs on to Maine residents.

To extend operating time to Maine's existing landfills, it is important not just to evaluate landfill expansions, but also to consider how to bring new or licensed but non-operating facilities online more quickly. This is a critical need as it currently takes several years from the beginning of the licensing process to the end when construction and operation are allowed to take place. Long-term disposal capacity is a significant and valid concern. With the exception of Aroostook County, which appears to have landfill capacity for a minimum of 40 years, it is clear that if considerable reduction in the amount of material going to landfills is not achieved, or unless new technology and infrastructure is brought online in multiple locations in Maine, a sizeable portion of Maine's landfill capacity will be gone within 20 years. Maine's increases in waste generation as discussed in Sections III and IV above, indicate that this timeframe could be even shorter. Costs related to hauling MSW, CDD, recycling material, salvageable material, compostable food waste, and other waste streams are a significant portion of the overall cost for the management of this material, in addition to its greenhouse gas emissions impacts. These costs will likely be passed on to Maine residents and communities.

As Maine evaluates adding new infrastructure and enhancing existing waste diversion programs, it is important to consider locating facilities near areas where waste material is generated, utilizing regionalization, and implementing "hub and spoke" models for transferring waste material to make hauling more efficient and cost effective. In addition to practical issues associated with managing an increased amount of waste over time and maximizing existing and new infrastructure, it is important to recognize that many waste streams that could be diverted are being disposed of because disposal is often the lowest cost option. There is a clear need for a market readjustment to incentivize more sustainable materials management to maximize long-term disposal capacity and increase efficiencies in our management of materials.

State's total landfill capacity **currently meets the criteria of "Long Term"** falling between **5-10 years without JRL expansion**. Imminent diversion efforts will extend this estimate.

SME
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August 9, 2024

DEP Additional Information Request (DEP AIR) and SME's responses combined & annotated ~ KAT

VIA EMAIL
Karen Knuuti
Environmental Specialist
Bureau of Remediation and Waste Management
Eastern Maine Regional Office

Subject: Response to Questions and Comments
Application for Determination of Public Benefit
Juniper Ridge Landfill

Dear Karen:

Sevee & Maher Engineers, Inc. (SME) submitted an Application for Determination of Public Benefit on behalf of NEWSME Landfill Operations, LLC. SME has prepared this letter in response to your questions and comments, dated July 30, 2024 to Lisa Turner of SME. For ease of reference we follow your original section and numbering format with our response.

1. **Section 1.5.1 Description of Current Waste types. CDD processing fines and clean wood waste are used as alternative daily cover (ADC). The application notes that if ADC was not available, virgin sand and gravel would be used, and that using alternative daily cover preserves landfill space for other materials. Please explain further; if ADC materials were not available, wouldn't the same amount of space would be taken up by virgin sand and gravel?**

   SME's Response: Construction and Demolition Debris (CDD) fines do not have other uses at this time, and therefore must be put in a landfill. If CDD fines were not recycled and used as ADC, they would be landfilled *and* a traditional soil daily cover would be used. Using CDD processing fines as ADC eliminates the need for soil daily cover on the days that CDD processing fines are available. Much of the clean wood waste consists of pallets that have nails and therefore are not usable for most applications where chipped wood is used, so the same is true for wood waste as for the CDD processing fines. Taking up space in the landfill with materials like virgin sand and gravel, which are not themselves wastes, is unnecessarily wasteful if there are available alternatives.

2. **Section 1.7.1 Changes in Maine Legislation. The application notes that if sludge acceptance volumes remain consistent with 2020 through 2023 data, JRL anticipates receiving approximately 83,200 tons of municipal and industrial sludges per year. As you may be aware, Maine Regional Conversion Facility, LLC is constructing a 200 wet tons per day sludge dewatering facility in Norridgewock. The facility is expected to be operational by late 2025. Additionally, it is our understanding that Casella Waste Systems (CWS) is partnering with Viridi Energy to reopen and expand an anaerobic digester facility in Brunswick which could reduce the volume of sludge delivery to JRL by 90 percent. Please explain how these initiatives could affect the amount of sludge and CDD bulking materials accepted at JRL.**

SME
SEVEE & MAHER
ENGINEERS

SME's Response: 83,200 tons of sludge represents approximately 94,800 cubic yards (CY) of waste, or landfill volume. If the two technologies are successful in achieving a 90 percent reduction by volume, that would be a reduction of 85,300 CY of waste delivered to the landfill. As discussed on page 1-14 of the PBD, the sludge is mixed at a ratio of one part sludge to four parts bulky waste in order to provide structural stability to the landfill.

A substantial reduction of sludge could negate the need for any out of state bulking material to mix with the waste. According to their 2023 Annual Report to the Maine Department of Environmental Protection (MEDEP), the ReSource Lewiston facility (ReSource) received 53,270 tons of waste from in-state sources, which represented 30 percent of their total 179,008 tons of material.[1] ReSource shipped 78,532 tons of CDD residual to JRL.[2] Assuming the 30 percent ratio remains the same, JRL would only receive about 23,560 tons of CDD residual from ReSource, a reduction of 54,972 tons. Using the overall compaction factor of 0.82 stated in the PBD, this would be approximately 67,000 CY of waste.

Adding the loss of sludge and loss of CDD residual from ReSource gives an overall reduction of about 152,300 CY of waste, or about 14.5 percent of the total annual waste volume delivered to the landfill. Since all processing facilities have planned maintenance shutdowns and occasionally experience unplanned shutdowns, JRL will continue to receive some volume of wet sludge. During these times, JRL will continue to be the option of last resort for Maine's sludge. If the processing facilities work as intended, and ignoring the sludge sent during shutdowns, this might mean a best-case increase in Phase II Expansion to a total of about 13 years. If the processing facilities do not achieve their planned schedules and/or the technologies do not function as effectively as stated, the increased duration of the Phase II Expansion could be substantially less.

There would not be any volume reduction from any loss of fines shipped from ReSource to JRL, as that would need to be replaced with virgin soil as previously described in Question 1, or virgin gravel, as described more completely in Question 8. Assuming it could be accepted in accordance with MEDEP rules and JRL licenses, it is anticipated that the same relative amount of bulky wastes would continue to be sent to JRL from the current sources, consistent with current waste disposal practices.

3. **Section 1.7.3 Penobscot Energy Recovery Company WTE Facility (now known as Eagle Point Energy Center LLC, or 'EPEC'). Please provide the current swap agreement between the Municipal Review Committee (MRC) and Pine Tree Waste, Inc. that is referenced in footnote 32. This section notes that "[s]ince the September 2023 shutdown of PERC, all bypass MSW, including MRC bypass MSW, has been sent to JRL for disposal." It is the Department's understanding that all MSW bypass from MRC-contracted communities is contractually obligated to go to the Crossroads Landfill in Norridgewock; however, a swap agreement was established to mitigate transportation logistical difficulties for MSW that was in closer proximity to JRL (i.e., greater Bangor area) such that this waste would go to JRL and an equal amount of waste would be delivered to the Crossroads Landfill from communities that contract with Pine Tree Waste, Inc. that are in closer proximity to that facility. Based on MRC's 2023 Annual Report, about 67% of MRC-contracted community MSW is destined for disposal at JRL while the Crossroads Landfill receives about 31%.**

[1] 2023 Annual Report for ReSource Waste Service of Lewiston LLC, pg. 5.
[2] 2023 Annual Report for ReSource Waste Service of Lewiston LLC, pg. 6.

Neither this response, nor the Swap Agreement, explain the roughly 20% difference. Also the tipping fee in the Agreement is redacted. CWS does not have to share its pricing with the state.
What is MSW tonnage/Cu yds from the MRC communities that opted to go to PERC?

SME's Response: The MRC communities were parties to a power purchase agreement with PERC that expired in 2018. When that agreement expired, the MRC communities split disposal between the PERC and Fiberight facilities. For those communities opting to go with Fiberight, the waste going to JRL is indeed a swap with Waste Management's Norridgewock facility that helps those communities avoid higher transportation costs. A copy of the swap agreement is included in Attachment 1. For MRC communities that opted to go with PERC (now EPEC), all bypass waste goes to JRL.

4. **Section 1.7.5 Other Maine Landfills. This section specifies that approximately 880,000 tons per year of waste is estimated to go to JRL under current conditions; however, the 5-year average waste disposal rate from 2019 to 2023 is noted as 860,771 tons per year. In 2023, 834,363 tons of waste, were disposed at JRL. A clarification should be provided.**

SME's Response: The amount of waste coming to JRL increased substantially in 2019 as compared to previous years and continued to increase from 2019 to 2022, with a slight decrease in 2023. To ensure adequate capacity to meet the state's waste disposal needs, an average of the 2021, 2022, and 2023 tonnages received at JRL were used to estimate the potential need for disposal capacity, assuming other facilities remained inoperable. Disposal for these three years was 882,000 tons in 2021; 934,000 tons in 2022; and 834,000 in 2023; for a three-year average of approximately 880,00 tons. Using an average of the three most recent years provides the most realistic estimate of future disposal to ensure adequate capacity.

5. **Section 3.1 Waste Characterization and Solid Waste Infrastructure Use. Regarding the amount of MSW bypass JRL received from Maine's waste-to-energy facilities, please explain the marked increase in bypass disposal from these facilities during this time period (2020 to 2022). Based on Table 3-2, the amount of MSW bypass from PERC, MMWAC, and ecomaine more than doubled during this time. It would be helpful to show the amount of bypass from each facility as it is the Department's understanding that while PERC contributed a significant portion of this MSW bypass disposed at JRL, the amount of MSW bypass from ecomaine also increased during 2022, and that bypass from MMWAC was not received at JRL prior to 2022.**

Currently **there is no time limit on sending bypass to landfill.**
The law states a facility must be **fully operational** at the start time of sending bypass to landfill.
Both **Fiberight** and **PERC** were either **closed** or **operating at limited capacity in 2020.**

SME's Response: During 2022, ecomaine conducted both annual spring outage maintenance and turbine maintenance that is scheduled once every seven years. The repairs began in March, and due to problems experienced by the turbine refurbishment facility, continued through most of 2022 and the fall outage maintenance, increasing the amount of bypass that was sent to JRL.

The tonnage from PERC received at JRL increased by a factor of about 2.5 from 2019 to 2020 when the facility's operational capacity was initially reduced, and nearly doubled again from 2020 to 2021 as operational capacity continued to fail. The bypass tonnage in 2022 and 2023 was similar to the bypass tonnage in 2021.

Bypass from MMWAC had previously been disposed of at Waste Management in Norridgewock. In 2022, MMWAC put their bypass disposal contract out to bid and JRL was the selected bidder, thus adding to the total amount of bypass received at JRL. **Why is JRL bidding on new contracts when capacity is so precious?**

The table below shows the tonnage received from each incineration facility from 2018 to 2023. It is conservatively assumed for purposes of the public benefit determination application that the total

bypass tonnage from the three facilities will be in the range of 205,000 to 250,000 tons for the foreseeable future.

The amount of bypass more than doubled in 2021.

Restricting the amount of time a facility can claim 'temporary' incapacity would reduce tonnage of MSW to JRL.

Current diversion efforts to reduce volume are ineffective.

MSW BYPASS TONNAGE RECEIVED FROM INCINERATORS AT JRL BY SOURCE

Year	PERC	MWWAC	ecomaine	Combined Total
	Tons	Tons	Tons	Tons
2018	24,100	0	100	24,200
2019	36,400	0	3,100	39,500
2020	94,200	0	8,300	102,500
2021	180,500	0	23,900	204,400
2022	171,700	12,600	72,000	256,300
2023	185,300	13,900	6,000	205,200

Notes:
1. Information provided by NEWSME.
2. Quantities rounded to the nearest 100 tons.

6. **Section 3.1 Waste Characterization and Solid Waste Infrastructure Use. While Table 3-3 shows that the amount of mixed CDD disposed at JRL has been relatively consistent from 2020 through 2022, data from JRL's annual reports illustrate that mixed CDD disposal has steadily increased from 199,405 tons in 2014 to 347,016 tons in 2023. Please explain how JRL works to ensure that the amount of mixed CDD disposed has been recycled to the extent practicable.**

Lewiston Resource has only had RCI certification Since February 2024.

Annual performance reports won't be due until ***2025.***

SME's Response: CDD materials are routinely diverted away from JRL and sent to ReSource who, as stated on their website, "recover components of value and transform waste into reusable commodities." ReSource further states that, "The Lewiston facility has been certified by the Recycling Certification Institute (RCI). The RCI certification was based on a rigorous evaluation performed by an independent third party of the facility's processes and protocols and it also verified the integrity of the facility's recovery/recycling reports."

In addition to the diversion of mixed CDD materials to ReSource, CWS-owned/operated transfer stations remove as many recoverable recyclable materials as possible out of all waste streams prior to preparing the material for transfer. This is done first by allowing/providing a place for customers to source separate materials ahead of the transfer process. During the loading/transfer process, CWS machine operators work to remove additional recyclable materials like tires and metal from the CDD, further increasing recycling rates and reducing CDD tonnage sent to JRL. Beginning in 2025, CWS intends to begin a mattress recycling program in Maine, which will further divert mixed CDD tonnage away from JRL.

https://www.recyclingcertification.org/wp-content/themes/icsr/data/evaluation_reports/1277/evaluation_report.pdf

7. **Section 3.1 Waste Characterization and Solid Waste Infrastructure Use. Table 3-3 includes the quantity of processed CDD sent to a landfill for daily cover, shaping, and grading in 2020, 2021, and 2022. The 2020 and 2021 quantities are based on the amount of CDD originating from Maine and processed at Maine facilities, but the 2022 quantity is not. A clarification should be provided.**

SME's Response: As described in the footnotes of Table 3-3, the first six rows of Table 3-3 are taken directly from data published by the MEDEP. The 2020 and 2021 data were taken directly from Tables 1 and 2 of the Maine Solid Waste Generation and Disposal Capacity Report for Calendar Years

2020 and 2021, published by the MEDEP in January 2023. Footnote 8 of Table 2 states that Table 2 "Includes only Maine-generated portion of CDD wastes from processing facilities located in Maine."

The 2022 data was taken directly from Table 7 of the Maine Materials Management Plan: 2024 State Waste Management Plan Update and 2022 Waste Generation and Disposal Capacity Report, published by the MEDEP in January 2024. This table includes all CDD wastes, including those generated within Maine and outside of Maine.

Row seven of Table 3-3 is specific to JRL and provides the quantity of CDD disposed of at JRL, with data taken directly from JRL's Annual Reports to the MEDEP.

In short, the distinction in the data between 2020 and 2021 versus 2022 comes from the MEDEP presentation of it.

8. **Section 3.2.1 Source Reduction and Reuse. This section notes that recycled materials are used in a number of applications at the landfill. Please state which recycled materials are used for which purposes.**

SME's Response: The following waste materials and waste-derived construction materials have been reused in the landfill and have helped perform critical functions for landfill structural stability, liner protection, drainage, and vector control:

JUNIPER RIDGE LANDFILL REUSED AND WASTE-DERIVED PURCHASED WASTE MATERIALS AND USES

Reused Materials	Uses within the Landfill
CDD/MSW Processing Residue - OBW	Sludge Bulking
Bypass MSW	Sludge Bulking; Liner Protective Layer (Soft Layer)
Mixed CDD	Sludge Bulking; Road and Sideslope Building
Contaminated Soils & Debris	Sludge Bulking;
Ash (various types)	Sludge Bulking; Odor Control; Gas Pipe Bedding
Recycled CDD Processing Fines	Alternative Daily Cover; Sideslope Grading and Shaping; Interior Road Construction
Chipped Wood	Sideslope cover; Alternative Daily Cover; Road Base Construction
Construction Fines	Sideslope Grading and Shaping; Bedding for Final Closure Cap

Five of the materials, CDD/MSW processing residue (i.e., OBW), bypass MSW, mixed CDD, contaminated soils and debris, and ash, are used to bulk the sludge. Without sludge bulking materials, the sludge would not be able to hold a sideslope and would slump to a nearly flat pile, which would need to be contained horizontally with tall berms. This type of landfill containment for sludge would require a much larger landfill footprint than is needed with the use of OBW for structural stability and would unnecessarily consume additional landfill volume.

Bypass MSW is used for the initial five-foot-thick protective "soft layer" over the leachate collection sand to protect the liner system from damage from equipment or sharp pieces in CDD. Some form of waste will be used for the soft layer because of its thickness.

The strength of the materials used for sideslope construction at any landfill is critical to the landfill's long-term stability, and specific materials are specified at each landfill to most effectively use the

available waste stream. Use of structurally sound materials such as mixed CDD in the outer 50 feet of the waste is critical to slope stability.

Interior road construction is necessary so that waste hauling trucks can transport the waste to the tipping area. These trucks, which include heavy tractor trailers, are over-the-road trucks that transport waste from the towns they serve to the landfill. Providing a solid, stable road that can be readily traversed by over-the-road trucks even in inclement weather is necessary to allow the volume of truck traffic at JRL to access the landfill in a timely manner and prevent trucks from getting stuck, puncturing tires, or breaking down from traveling on uneven ground. If CDD processing fines were unavailable, virgin gravel would be required. As previously mentioned in Question 1, there is no other use for fines, and they must be placed in a landfill whether as a beneficial use or simply as waste. The use of these materials for structural needs within the landfill offset the use of virgin gravel and preserve landfill space.

Similar to the internal road construction, gas piping requires a structurally stable underlayment in the form of pipe bedding. When available, ash provides a suitable bedding material, and thus offsets the need to use virgin stone or sand within the landfill. When available, ash can be mixed with odiferous wastes to help reduce nuisance odors due to its alkaline pH.

Construction fines are a waste material that is recycled by others to meet construction specifications and purchased for use in landfill cover projects and sideslope grading requirements and replace virgin soil.

CDD processing fines are processed by others and used as ADC, as described in the response to Question 1. CDD processing fines are also useful in shaping the landfill sideslopes prior to placing synthetic intermediate cover material.

The chipped wood is primarily from pallets, and as mentioned in Question 1, contains nails. This material is suitable for the initial base course of the interior access roads, provided that they are well covered with a material such as fines that does not contain nails, thereby allowing safe travel by rubber-tired trucks. The chipped wood is also used as ADC and intermediate cover on sideslopes because it is resistant to erosion.

9. **Section 3.3.2 Recycling. Please list the CWS-owned and/or operated transfer stations in Maine with recycling capability, the drop-off locations for recyclables, the municipalities in which CWS collects curbside recyclables, and the types of recyclables handled.**

   SME's Response: The CWS-owned and/or operated transfer stations in Maine accept a wide variety of recyclable materials, including:

   - Mixed Construction and Demolition Debris Waste and Bulky Items – drywall, metal, shingles, concrete, furniture, appliances, mattresses (see Question 6), and carpet;
   - Clean Wood Wastes – separated clean pallets, non-painted/non-pressure treated wood;
   - Cardboard;
   - Mixed Recyclables – cardboard, paper, plastics, metal cans, and glass;

- Universal/Electronic Waste – batteries, ballasts, light bulbs, TVs, monitors, computers, printers, and stereos;
- Mixed Scrap Metal – various scrap metal and white goods;
- Tires;
- Yard Waste or Leaves – clean brush, tree limbs, lawn clippings, and leaves; and
- Waste Oil – used oil collected from residents for recycling or to be burned on-site.

The location of each CWS-owned and operated transfer station and what they accept is included in the following table. **Information is outdated or inaccurate. Old Town is my local transfer station.**

RECYCLABLE ITEMS COLLECTED AT CWS OWNED AND/OR OPERATED TRANSFER STATIONS

	Mixed Construction & Demolition Waste and Bulky Items (Mixed CDD)	Clean Wood Wastes	Corrugated Cardboard (OCC)	Mixed Recyclables	Universal/ Electronic Waste	Mixed Scrap Metal and White Goods	Tires	Yard Waste or Leaves	Residential Wood Ash	Waste Oil
Arundel	X		X	X	X	X				
Dayton	X			X		X	X			
Hampden	X	X	X		X	X	X			
Houlton	X		X		X	X		X		
Jonesboro	X			X	X	X	X			X
Mars Hill		X	X	X	X	X	X			
Naples	X	X				X	X			
Old Orchard Beach	X				X	X				
Old Town	X		X	X	Unavailable X	X	X		Unavailable X	Unavailable X
Orient	X				X	X				
Waterville	X		X	X	X	X	X			
Wells	X			X		X				
West Bath	X			X	X	X	X			
Westbrook	X			X	X	X	X	X		
Weston	X				X	X				

CWS' Lewiston Materials Recovery Facility (MRF), Scarborough MRF, and Brokerage recovered and shipped approximately 93,000 tons of recyclables in Maine in 2023. This included materials recovered from approximately 178 different commercial and industrial businesses (excluding CWS entities) and more than 60 municipalities, which include towns represented by the Maine Resource Recovery Association. Many of the businesses served have multiple locations or various lines of business across Maine. Materials received through the two MRFs and Brokerage included: single stream (Zero-Sort), #1-#7 plastics, rigid plastics, #2 and #4 plastic film, aluminum beverage/tin/steel cans, ferrous/non-ferrous metals, white goods, high grade office paper, mixed paper, newspaper, magazines, mixed glass, mixed textiles, corrugated cardboard, and various other accepted materials.

CWS OPERATED CURBSIDE RECYCLING AND DROP-OFF RECYCLING

City/Town Serviced	Curbside Recycling Collection (Zero-Sort)	Drop-off Recycling Services (Zero-Sort)
Auburn	X	
Bangor	X	
Bath	X	
Biddeford	X	
Blaine	X	
Brewer	X	
Brunswick	X	
Buxton	X	
Cumberland	X	
Dayton	X	
Durham	X	
Eddington	X	
Falmouth	X	
Glenburn		X
Gorham	X	
Hermon	X	
Kennebunk	X	
Kennebunkport	X	
Levant	X	
Lewiston	X	
Milford	X	
Monticello		X
North Yarmouth	X	
Old Orchard Beach	X	
Old Town	X	Aavailable with sticker
Portland	X	
Pownal	X	
Raymond	X	
Richmond		X
Saco	X	
Sanford	X	
Scarborough	X	
South Portland	X	
Springfield	X	
Veazie	X	
Webster	X	
Westbrook	X	
Windham	X	
York	X	

10. **Section 3.3.2 Recycling. The application describes CWS' work with a large city in Maine to assist with curbside tagging programs, audits, and post-tagging audits for recyclables. This effort halved the contamination rate; has CWS considered taking this approach in other municipalities to decrease contamination of recyclables?**

    SME's Response: CWS is currently supporting several municipalities in these efforts and would be happy to assist any other municipalities who are interested in this approach. However, CWS notes that effective projects require an active, willing partner in order to achieve successful outcomes.

11. **Section 3.3.3 Universal and E-Waste Consolidation Facilities. Please list the CWS-owned and/or operated facilities in Maine providing universal and e-waste collection capability.**

    SME's Response: As shown in the table in response to Question 9, CWS-owned and/or operated transfer stations in Arundel, Hampden, Houlton, Jonesboro, Mars Hill, Old Orchard Beach, Old Town, Orient, Waterville, West Bath, Westbrook, and Weston collect universal and/or electronic waste.

    This is an incorrect statement. Old Town DOES NOT collect e-waste, wood ash or used oil. See table Pg 7

12. **Section 3.3.4 Wood Waste Processing. The application states that an on-site transfer station is used to collect clean wood waste, which is chipped and used for alternative daily cover. We understand land clearing debris, pallets, and rail ties may be collected and chipped at this transfer station. Consideration should be given to using chips from land clearing debris for erosion control projects during construction at the facility site or for off-site projects rather than within the landfill. Consideration should be given to selling chipped wood waste as a green wood chip and chipped pallets and rail ties as substitute fuel chips to facilities with the appropriate fuel substitution license.**

    SME's Response: All new cell construction projects at the site require the contractor to place silt fence or a "bark mulch sediment barrier" (also known as Erosion Control Mix or ECM) downgradient of any construction activity. Sargent Corporation, who has been responsible for all the cell construction at the site since the initial construction in 1996, uses ECM from land clearing debris on-site whenever possible. Use of silt fence is limited to times when ECM is not available.

    As initially discussed in Question 1, much of the wood waste at the site that is considered to be clean wood waste consists of pallets, which are held together with nails. Many nails remain within the chipped material, making it unsuitable for many projects and unlikely to be considered a desirable product for nearly all off-site projects. These clean wood wastes are chipped and used within the landfill as ADC, providing an alternative to using virgin soil for the same purpose. This practice is currently being done at other Maine landfills as well as JRL.

    At this time, due to recent per- and polyfluoroalkyl substances (PFAS) legislation, 90 percent of Maine's municipal sludge is sent to the landfill. Additionally, two MSW incineration/processing facilities are inoperable, causing hundreds of thousands of tons of MSW bypass to be sent to the landfill. The wood chips are critical in helping control vectors and odor from the sludge and bypass MSW. If an abundance of other suitable ADC materials becomes available, and purchasing clean virgin soil is no longer necessary, the facility will consider alternate outlets for the chipped wood material. In the past, CWS has sold chipped wood waste as a substitute fuel, but there has not been a market for it in recent years.

    This may change dramatically in 2025 when WWTS diversion efforts come online

13. How much daily cover has been used at JRL in the past several years, and what percent has been virgin sand and gravel as opposed to alternative daily cover?

SME's Response: The following table shows the total quantity of daily cover used at JRL, and the percent of that total that was virgin soil for 2021 through 2023. Soil used for daily cover was converted to tons assuming a standard density of 115 pounds per cubic foot.

DAILY COVER MATERIAL USED AT JRL

Year	Year		
	2023	**2022**	**2021**
Soil (CY)	35,604	19,593	0
Soil (equivalent tons)	55,275	30,418	0
ADC (tons)	51,022	73,836	95,563
Total Daily Cover (tons)	106,297	104,254	95,563
Virgin Soil as Percent by Weight of Total Daily Cover	52%	29%	0%

14. Section 3.3.4 Wood Waste Processing. The application states that in 2023, clean wood was separated from CDD and land clearing debris and other clean wood waste was collected from four CWS facilities, and sent for processing to divert it from direct disposal. Where and for what use was the processed material sent? Can this be done at other CWS-owned and/or operated transfer stations to help increase recycling rates?

SME's Response: As described in the response to Question 9 above, CWS' transfer stations in Hampden, Mars Hill, and Naples separate clean wood from CDD at their transfer stations. The clean wood from Hampden is sent to the JRL clean-wood transfer station, where it is chipped and used on-site as ADC. Clean wood from Mars Hill is sent to Aroostook Waste Solutions for the same purpose. The clean wood collected from Naples is sent to ReSource in Lewiston for further processing and/or chipping, with the end use determined by ReSource. Brush and branches from Houlton are sent to Aroostook Waste Solutions to be burned, then landfilled. Brush and branches from Westbrook are sent to the Riverside Recycling Facility in Portland for further processing. Typically, these materials are made into ECM or sold as biomass fuel.

Many CWS-operated transfer stations are owned by towns. CWS operates facilities based on the needs of towns and would be open to expanding wood waste collection if space allows. Many towns already have other outlets for wood wastes and partner with other local wood processors who properly manage the material, converting them into useful products.

15. Section 3.3.5 Composting, Processing, and Beneficial Reuse. Additional information should be provided regarding the over 31,000 tons of organics that CWS had a direct role in recovering. Please describe the scope, type, and location of these projects. In addition, please provide details regarding the management of the beneficial use project by CWS for a major chemical manufacturer's byproduct.

SME's Response: The sources of the 31,000 tons of material handled by CWS' organics division are listed in the table below.

ORGANIC MATERIALS RECOVERED IN 2022

Location	Material	tons per year
Rockland	seaweed residual	20,000
Easton	wood ash	1600
West Enfield	wood ash	2500
Jonesboro	wood ash	2100
Skowhegan	lime grit	1200
Skowhegan	lime cake	1300
Skowhegan	mill lime	2500
Total		31,200

The beneficial use project referred to in the application was for AlgeFiber, a seaweed residual. Because AlgeFiber is rich in organic matter, magnesium, and lime value, AlgeFiber improves agricultural soils, and enhances crop yields. The project has enjoyed ongoing success, with the material helping local farmers and soil blenders improve soil quality and performance. CWS continues to work with the client to further develop improvements and innovations.

16. **How do the various CWS program areas (such as organics, recycling, hauling, and facilities) work together to minimize the amount of waste sent for disposal?**

    SME's Response: CWS has developed an integrated statewide business entity to manage each waste stream as efficiently as possible and provide the greatest amount of waste minimization that can be gleaned from each waste management methodology. These materials include a variety of wastes as described in responses to Question 9, along with many others. Removing these many and varied items from the waste stream greatly reduces the amount of material needing to be landfilled.

    CWS provides rental dumpsters for construction projects, and therefore has the ability to transport the CDD to an appropriate recycling facility such as ReSource, reducing the amount of unprocessed/recycled CDD that enters the landfill.

    CWS' on-site chipping turns waste materials into reusable products that are used in various ways to offset the use of virgin soil or gravel in the landfill, as more completely described in the response to Question 14.

    The CWS organics division collects food wastes and other wastes from small industrial clients (as described in Question 15) and composts the collected material for use as a soil amendment, further reducing the waste stream to the landfill.

    In communities where CWS provides transfer stations or waste hauling, they have the best opportunity to control and divert the waste stream prior to landfilling. CWS' recycling efforts are more completely discussed in Question 9.

17. **Section 3.3.7 Education and Innovation. This section notes that CWS deployed a mobile recycling app to six Maine communities and additional deployments are planned for 2024. Education and outreach are important factors in implementing successful recycling programs. How is this app deployed and can it be deployed as a statewide initiative to educate the public about recycling?**

It is unclear how and why the app was deployed to only six communities during this first phase. More information about this initiative would be helpful.

SME's Response: CWS' "Recycle Better" app is a resource and engagement tool. In addition to recycling guidance that is applicable statewide, it includes localized information, including scheduling information (e.g., what day is my pickup?), service notices (e.g., storm delays), and third-party recycling resources (such as addresses for local textile drop-offs). Set up and deployment takes time in each community. Because of this, and because it is a new solution, CWS has been deploying the app gradually with the municipalities that opt into it. CWS intends to continue expanding coverage to more customers in Maine and would be happy to explore this further with the MEDEP.

18. **Section 3.4 BGS Efforts to Promote the Solid Waste Hierarchy. The application states that BGS provides assistance to municipal decision-makers regarding waste management, but examples were not included. A clarification should be provided.**

SME's Response: The last PBD application was submitted by the Maine State Planning Office (SPO) in 2011. There was a list of mechanisms for the SPO to furnish municipal decision-makers with information, direction, and technical and financial assistance to aid them in managing their solid waste in an environmentally beneficial and cost-effective manner at the time the application was submitted.

The SPO was eliminated July 1, 2012, and the ownership and responsibility for three State-owned landfills was transferred to the Bureau of General Services (BGS), but the assistance services outlined under this section in the 2011 PBD did not transfer over to BGS.

BGS remains current with regional, national, and international solid waste trends, developments, and laws, for their effects and relevance to Maine's MSW management, and for future planning purposes. **But no action taken since 2012. MMTF under GOPIF may assist in funding for efforts.**

19. **Section 5.0 Consistency with Ensuring Environmental Justice for the Community in which the Facility is Proposed. This section specifies that "[a]n expansion of the monitoring program to include the additional 61 acres will continue to protect people and the environment surrounding the landfill." Does BGS and NEWSME anticipate making any enhancements to the current monitoring programs if an expansion is approved?**

SME's Response: As concluded on page 10-1 of the 2023 Annual Water Quality Report for JRL prepared by SME, "site groundwater and surface water quality data do not show adverse effects from the performance of the landfill cells or leachate collection and transport systems" and "and do not indicate any significant landfill-related impacts to water quality from malfunction of the landfill liners." As currently envisioned, the Phase II Expansion will cover some of the current monitoring wells located to the north of Cells 14 and 17. Those wells will be abandoned by drilling out the well materials and grouting with a cement-bentonite slurry, in accordance with the MEDEP guidelines. New wells will be located at the northern boundary of the Phase II Expansion to replace the wells located to the north of the Cells 14 and 17, which represent the northern boundary of the current expansion. Additional wells will be added along the easterly and westerly sides of the Phase II expansion, similar to those located along the easterly and westerly sides of the first expansion, increasing the overall area monitored at the site.

Regarding the property value guarantee for neighbors living in the immediate proximity to JRL, have any of the neighbors taken advantage of this program?

SME's Response: Casella has purchased eleven houses and two tracts of land in immediate proximity to the landfill. They have subsequently sold two of the houses.

20. **Appendix J, City of Old Town Host Community Agreement. Section 7 of Old Town's Host Community Agreement notes that "persons owning land contiguous to a State-owned Landfill may request that quarterly water quality sampling and analysis be performed on their private water supply." Please specify whether any neighboring water supplies have been sampled as part of this program and if so, please provide the Department with the results.**

SME's Response: Since the program was first offered in 2004, a total of 36 neighbors have taken advantage of the water quality sampling offered by CWS, including homes on Stagecoach Road, West Old Town Road, Bennoch Road, and West Coiley Road. The number of people who requested a water test each year is listed in the table below; some neighbors have had their water tested several times. The testing results are tabularized in Attachment 2.

PARTICIPANTS IN WATER TESTING PROGRAM

Year	Total number of participants
2004	22
2006	11
2013	2
2014	1
2016	3
2019	1
2020	1
2022	4
2023	1

21. **Members of the public commented on CWS' program to provide bottled water to residents, and assumed this is done in the event a residential well has been contaminated by the landfill. The Department has no data that demonstrates residential well contamination due to the landfill; please explain the intent of the bottled water program.**

SME's Response: As can be seen in the results included in Attachment 2, there has been no contamination attributable to the landfill observed in any of residential wells near the landfill. When CWS entered into the initial OSA with the SPO, it chose to repeat the program it had initiated at Pine Tree Landfill, and offered bottled water to the surrounding homes to be a good neighbor and assuage any concerns of those who live next to the landfill.

22. **Members of the public commented on the level of PFAS in the landfill leachate and CWS' leachate PFAS treatment system in use at a Vermont landfill. Please discuss CWS' experience with the leachate PFAS treatment system, including timing of engineering design, installation, and operation, treatment outcome, and whether CWS is considering installing PFAS leachate treatment at JRL.**

SME's Response: In a report to the BGS published in January 2023, SME and Crawford Engineers conducted a study of methods to treat PFAS in leachate generated at JRL (and at the Dolby Landfill in East Millinocket). The study identified readily available methods to reduce the concentration of six regulated PFAS to no more than 20 ng/l, which was the Maine Interim Drinking Water Standard for PFAS for drinking water at the time, even though a drinking water standard is arguably inapplicable to leachate. The United States Environmental Protection Agency (U.S.EPA) has subsequently lowered the drinking water standard to 4 ng/l. There is no standard for treatment or pretreatment of leachate in Maine or any other northeastern state.

Review of technologies indicated that Foam Fractionization (FF) would likely be capable of reliably meeting the 20 ng/l standard. Samples of the JRL leachate were obtained and sent to two laboratories for bench scale testing using FF. Both laboratories reported results consistent with the 20 ng/l interim standard. Other technologies such as adsorption (e.g., activated carbon), reverse osmosis, ion exchange, and thermal destruction are also under evaluation, with each technology having unique challenges relating to energy usage, long-term scaling concerns, and disposal of residuals. In particular, reverse osmosis technology may be a viable solution if a long-term solution for residual disposal is available.

CWS is in the process of scoping and evaluating multiple technologies for treatment or pretreatment of the JRL leachate. Since August 2023, CWS has been evaluating FF equipment at their Coventry, VT landfill to determine if FF is a truly viable technology to remove PFAS from leachate and could be implemented effectively at JRL. At this time, for the five PFAS compounds regulated by Vermont, the Coventry system appears to be removing 96 to 99 percent of four of the five PFAS compounds, and 66 percent of the fifth PFAS. Formal pilot testing of the project will be conducted in 2024 in order to establish a technology-based effluent standard for implementation at that facility.

23. A common theme of the public comments has been the belief that CWS has utilized significant landfill capacity for disposal of waste originating out of State, rather than conserving the space for waste originating in Maine, and that providing additional landfill capacity now will inhibit efforts to reduce waste generation and disposal. Please address these concerns.

SME's Response: As an initial matter, it is important to be clear about the terminology with respect to this topic. Because JRL is owned by the State, it can only accept waste that meets the statutory definition of "waste generated within the State." JRL makes every effort to comply with that requirement, and thus does not accept out of State waste. Some members of the public have recently begun to emphasize that some of the waste that meets the definition of "waste generated within the State" nonetheless originated from out of State and have urged a change in what constitutes so-called out of State waste. Thus far, although the Legislature has amended the definition of "waste generated within the State," it has declined to focus solely on where it originated, and so we understand this question to be directed at a legal practice of accepting waste generated by a recycler or processor located in Maine that is, therefore, waste generated within the State.

Only a small fraction of the waste disposed of at JRL can be considered as having originated from out of State. To aid in the construction of a structurally stable landfill, JRL has contracted with ReSource, which is located in Maine, to take OBW from their residual stream and fines from their CDD processing. As stated on page 5 of ReSource's 2023 annual report, 125,738 tons of waste comes to ReSource from outside Maine. This represents approximately 70 percent of the waste ReSource handled last year. On

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page 6 of their 2023 Annual Report, ReSource states that it shipped 41,245 tons of CDD fines (to JRL) for shaping and grading and ADC, and 49,803 tons of construction fines. These materials were used to offset virgin soil or gravel. The volume of landfill space that these materials occupied would otherwise be filled with soil material if the recycled material were not available, hence their origin is unimportant with regard to the use of landfill space.

According to the same report, approximately 78,532 tons of CDD residual was also shipped to JRL from ReSource. Assuming that 70 percent of that total is from out of State, approximately 54,972 tons of waste generated within the State that originated out of State went to Juniper Ridge in 2023 to be used as bulking material for sludge. That is only about 6.6 percent of the total tonnage of waste going to JRL.

While everyone can agree that there should be more recycling and waste reduction facilities such as incinerators, there is no fast or easy solution to increasing the availability or participation in those alternatives. The air permitting for a new incinerator facility would be very challenging, because such projects are likely to generate strong public opposition, and the cost for adequately treating air emissions is likely to be cost prohibitive at this time. There is a reduction in the percent of waste being recycled, as borne out by Figure 2 on page 8 of the 2024 Maine Materials Management Plan, which shows that the tons of MSW diverted is generally unchanged since 2012, while total tons of MSW generated has increased. Despite the drop in the world market for recyclables and some towns dropping recycling alternatives due to the accompanying increase in cost, Casella continues to work with and encourage towns to engage in recycling activities. We believe the future will bring an increase in recycling and waste reduction efforts as time goes on, but these options will always need landfill space for their residuals and during shutdowns. For the time being, the landfill provides the "backstop" that provides an option of last resort for many communities in Maine.

In actuality, landfill is serving as the *first resort* for under-performing, mandated, municipal waste management systems that use bypass as admission to JRL with anemic enforcement from oversight.

If you have any questions regarding these responses, please do not hesitate to contact me at 207.829.5016 or via email at Lisa.Turner@smemaine.com.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Lisa Turner, P.E., L.S.S.
Project Manager

cc: Lane Gould--BGS
Jeffrey Pelletier, Wayne Boyd--CWS
Eric Hamlin, Kathy Tarbuck, Sean Dougherty, Carla Hopkins, Victoria Eleftheriou—MEDEP

Attachments: 1: Swap Agreement with Waste Management for Fiberight Communities
2: Residential Well Water Quality Results

ATTACHMENT 1

SWAP AGREEMENT WITH WASTE MANAGEMENT FOR FIBERIGHT COMMUNITIES

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December 1, 2023

MRC's Swap Agreement with Crossroads and JRL

James Condela, Chief Executive Officer
Innovative Resource Recovery, LLC
92 Harold Bouchard Way
Hampden, ME 04444

Re: Letter Agreement – Swap Tonnage

Dear James:

The purpose of this letter is to memorialize the agreement between Pine Tree Waste, Inc. a Maine Corporation and wholly owned subsidiary of Casella Waste Systems, Inc. ("Casella") (hereinafter "Pine Tree"), Innovative Resource Recovery, LLC ("Innovative") and Municipal Waste Solutions, LLC ("MWS"), in order to continue an agreement[1] with regard to Swap Tonnage as defined below, to take effect January 1, 2024, continuing for a two year term, through December 31, 2025. Either party may terminate this Agreement at any time in the event of a material breach by the other party that remains uncured after: (i) in the event of a monetary breach, ten (10) calendar days following written notice thereof; and (ii) in the event of a non-monetary breach, sixty (60) days following written notice thereof. Such termination shall be effective immediately and automatically upon the expiration of the applicable notice period, without further notice or action by either party and shall be in addition to any other remedies that may be available to the non-breaching party.

Swap Tonnage: means tonnage subject to a waste swap arrangement pursuant to which (a) Bypass MSW waste generated in Maine from MWS customers, primarily within the greater Bangor area, is delivered to Juniper Ridge Landfill ("JRL") rather than being delivered to the Crossroads Landfill ("Crossroads") ("Diverted Waste"), provided that Diverted Waste shall specifically exclude commercial MSW and non-MWS contracted residential MSW: (i) collected by Pine Tree; or (ii) that is the subject of a contract between MWS and Pine Tree and its affiliates for disposal and/or processing; and (b) equivalent tonnage of MSW originating in Maine that otherwise would be delivered by Pine Tree to JRL is instead delivered by Pine Tree to Crossroads ("Replacement Waste"); and (c) for which Diverted Waste, Innovative and MWS shall pay directly to Crossroads amounts equivalent to the Crossroads tipping fee as if such Diverted Waste had been delivered to Crossroads, and for which the Innovative and MWS shall pay Pine Tree a delivery fee of [redacted] per ton for Swap Tonnage to Crossroads.

All Swap Tonnage shall be MSW and shall be delivered in accordance with the customary delivery requirements for the Crossroads and/or JRL as applicable and may not include Unacceptable Waste. In the case of JRL, all tonnage delivered to JRL must originate within the State of Maine.

"Unacceptable Waste" means any material that is not MSW, including without limitation any material that by reason of its composition, characteristics or quantity is ineligible for disposal at Crossroads or JRL, as applicable, under any applicable federal, state or local laws, rules, regulations or permits; (b) hazardous, toxic, radioactive, hospital or laboratory wastes or substances; and (c) any other material that Pine Tree, JRL, or Crossroads, as applicable, reasonably concludes would require special handling outside the normal course or present an endangerment to its facility, the public health or safety, or the environment. For the purposes of this agreement, hazardous waste, construction and demolition debris, processed construction and demolition debris, or oversize bulky waste are considered Unacceptable Waste.

Innovative and MWS shall be responsible for payment of all MSW bypass from MWS customers, including any MRC contracted Members.

[1] Pine Tree, Municipal Review Committee, Inc. ("MRC") a Maine non-profit corporation, and MWS are parties to a swap tonnage letter agreement dated December 16, 2022, which expires December 31, 2023.

Pricing will be increased annually on the anniversary of each year of the term by a percentage equal to the lesser of (a) 3.0% or (b) the year-over-year percentage change in the Consumer Price Index for All Urban Consumers: All Items in U.S. City Average (CPI-U). Consumer Price Index increases will be based on the Bureau of Labor Statistics as reported for the most recent month prior to the date of pricing increase/reset using the unadjusted percentage change for the most recent month as compared to the same month for the prior year. Reference is made to https://www.bls.gov/news.release/cpi.t02.htm

Sincerely,

Brian Oliver
Vice President

Understood and Agreed:

James Condela

Innovative Resource Recovery, LLC
Name: James Condela
Its: CEO

12/1/2023
Date

James Condela

Municipal Waste Solutions, LLC
Name: James Condela
Its: CEO

12/1/2023
Date

ATTACHMENT 2

RESIDENTIAL WELL WATER QUALITY RESULTS

Omitted for brevity

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Kat Taylor – public comments on Juniper Ridge Landfill Expansion – Public Benefit Determination Application July 16, 2024

The following presentation was presented at the PBD Application meeting on July 16, 2024 by Lisa Turner from Savee & Maher Engineers.
Can be viewed at: https://www.youtube.com/watch?v=tLxFwPf1shg

I noticed multiple inconsistencies, outdated information and misleading comments that formed a deceptive report on the urgency of JRL expansion. I pointed these out to Ms. Turner but she did not deem it worth the effort to correct them.

Below are additional slides, corrections and additional information that will help clarify and expand on this presentation.

SME benefits financially from JRL expansion since they contract with Casella for past and future landfill development.

Therefore the information in this PPT is biased and bears further scrutiny.
~ KAT

Juniper Ridge Landfill
Determination of Public Benefit

Public Hearing

Meeting, not a hearing

July 16, 2024

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casella

1:55:04 / 3:04:05

Juniper Ridge Landfill ownership and management

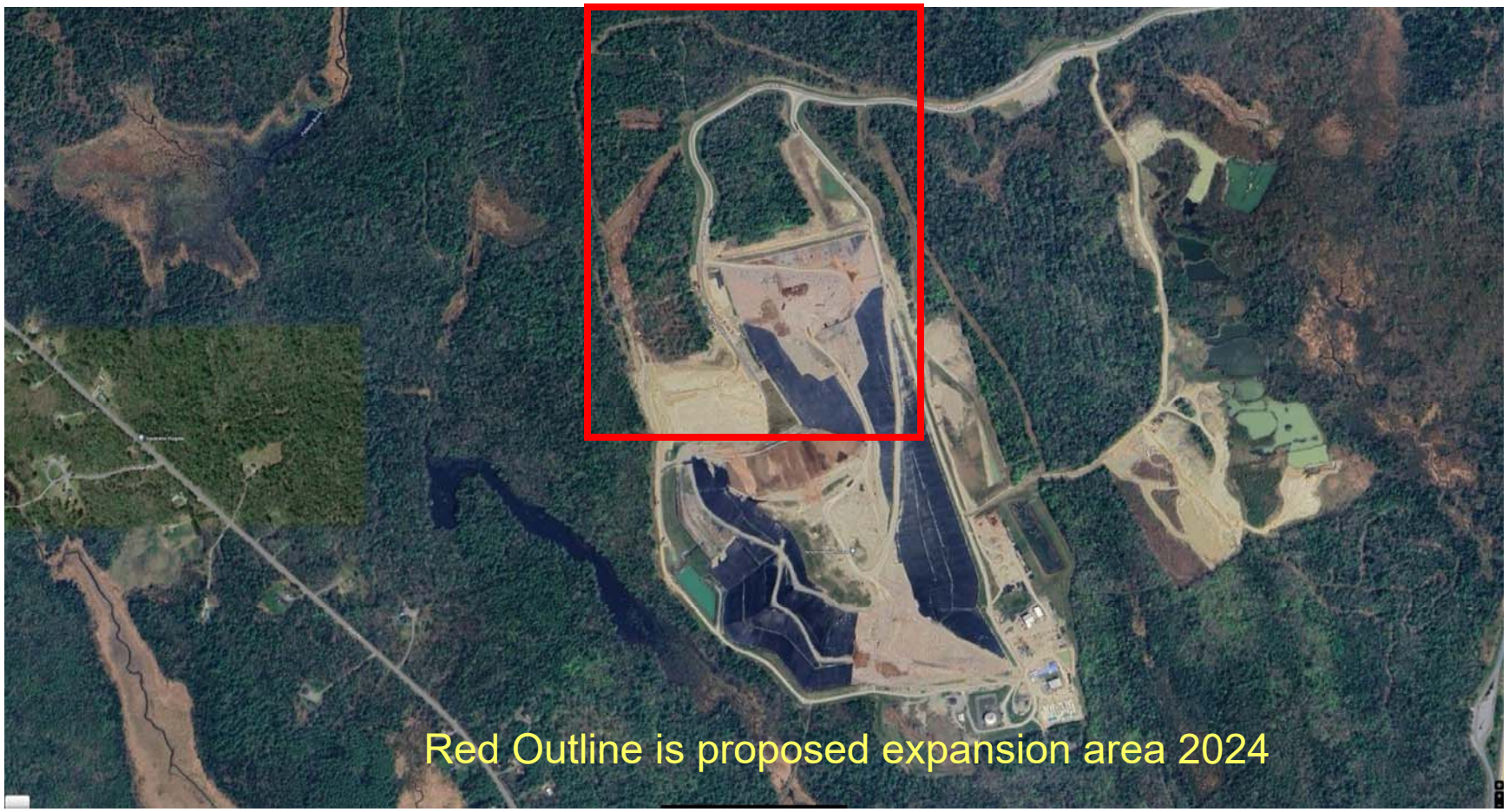
- Owner – State of Maine
- State management – Bureau of General Services
- Landfill operator – NEWSME Landfill Operations, LLC (a subsidiary of Casella Waste Systems)


Very outdated image of JRL around 2016 or earlier
Juniper Ridge Landfill
Wells Conference Ce...
1:55:34 / 3:04:05
CC

2024 Satellite imagery of JRL

Inserted slide by KAT

Google Maps est date



2024 Satellite imagery of JRL

Inserted slide by KAT

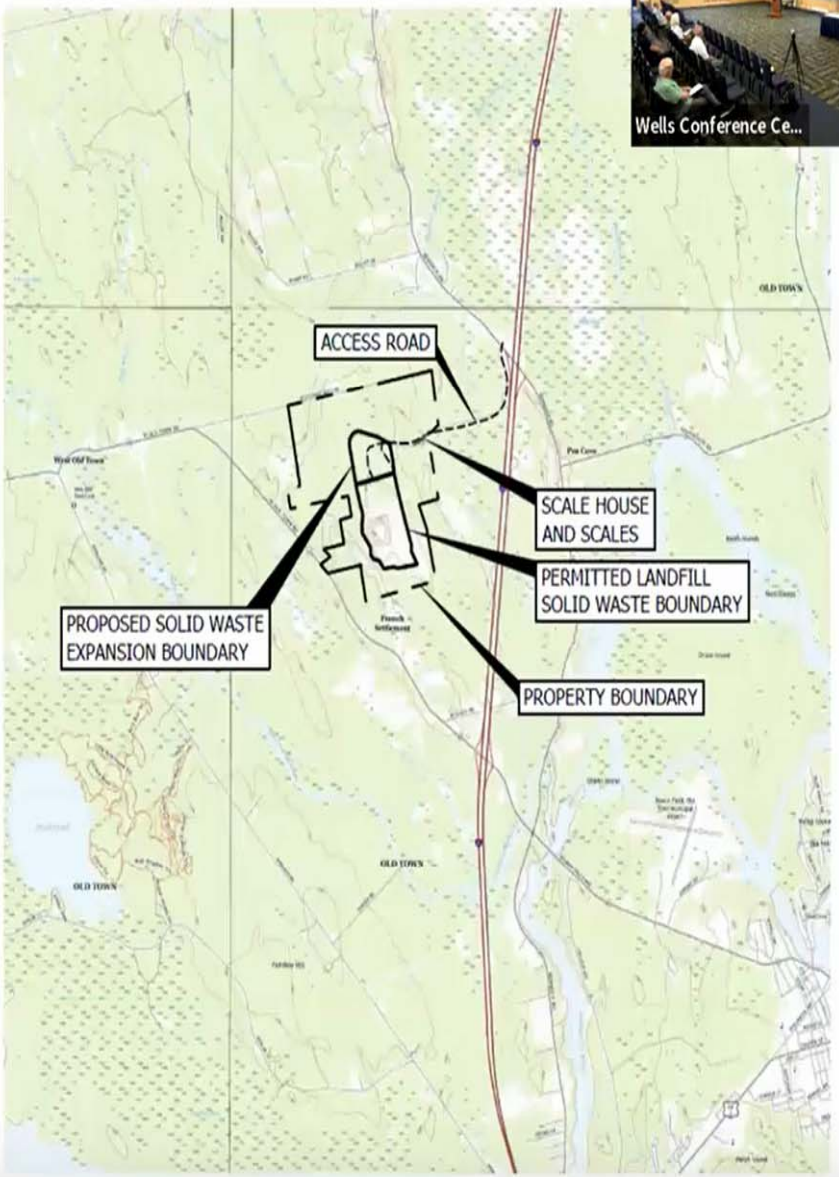
Google Maps est date

2024 Satellite imagery of JRL

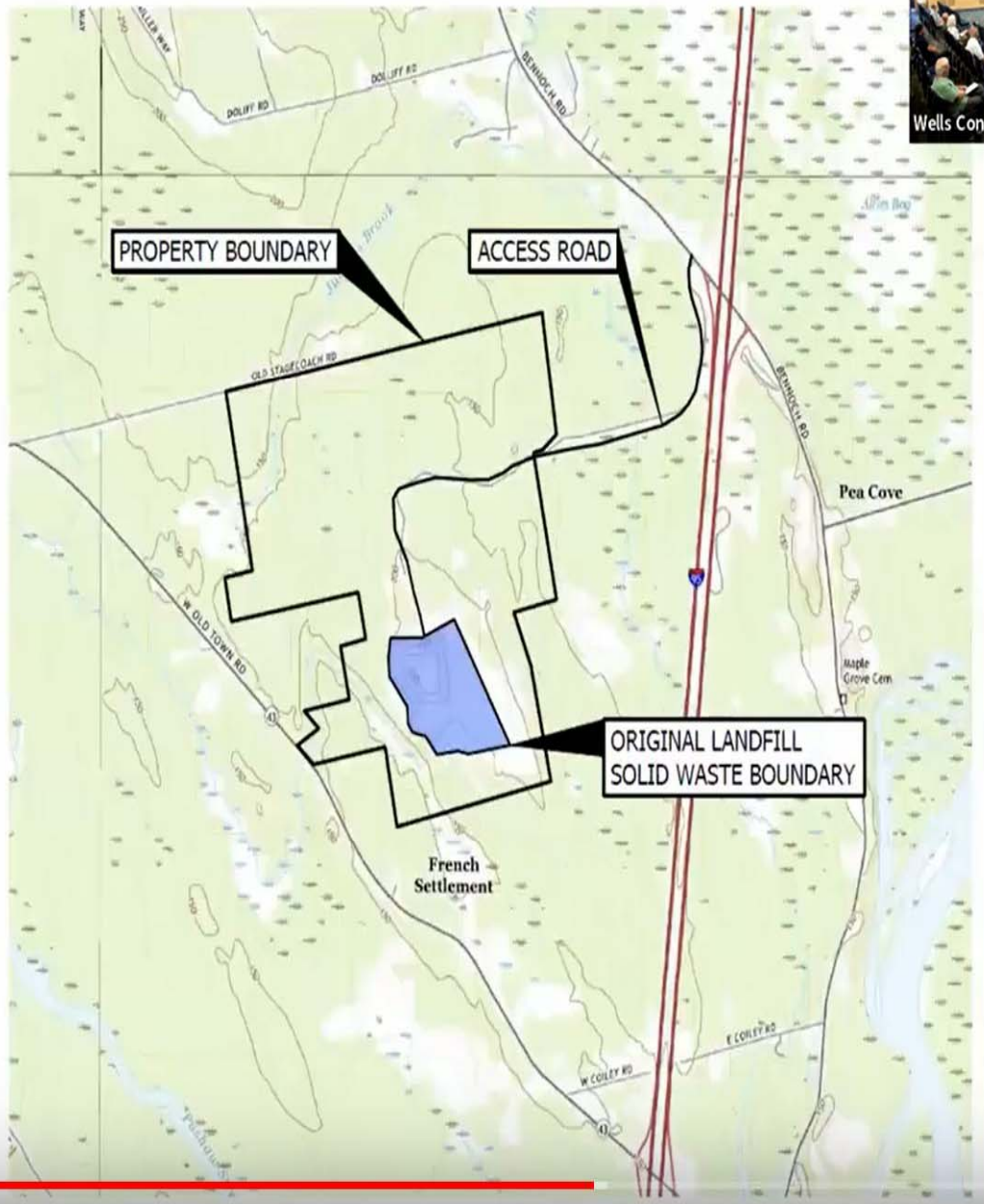
Inserted slide by KAT

Google Maps est date

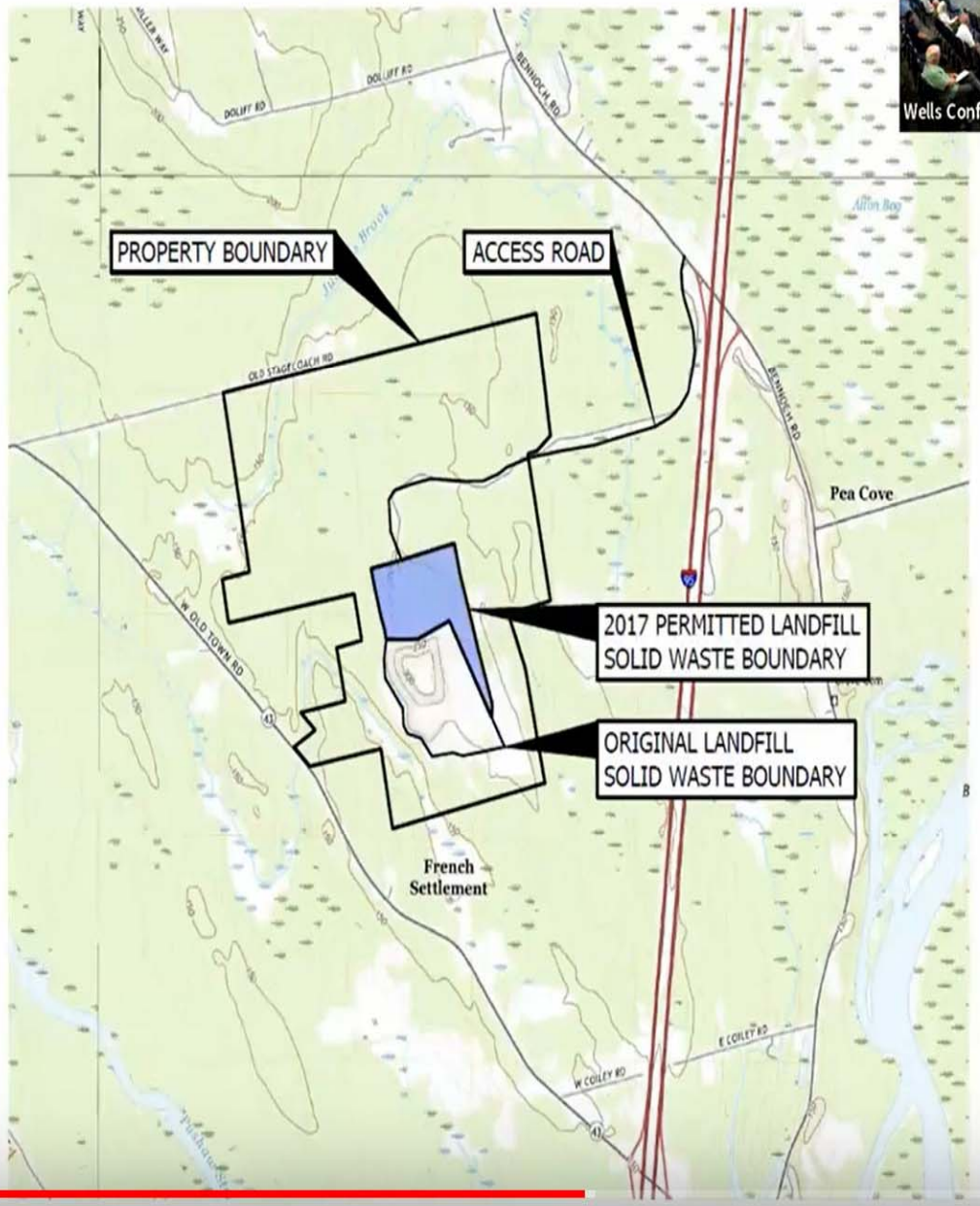
Juniper Ridge Landfill Location



Original Papermill Landfill 1996

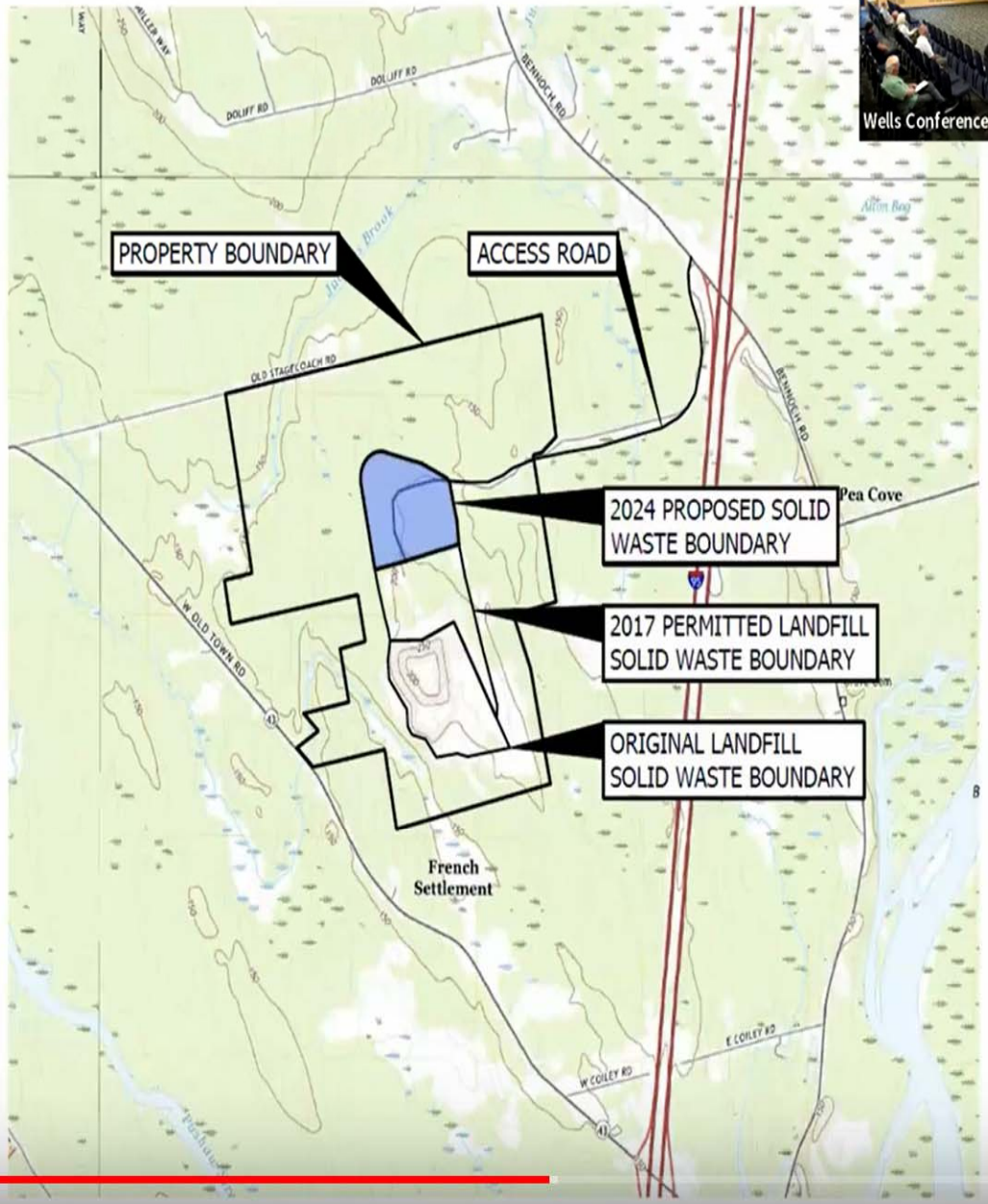


2017 Expansion

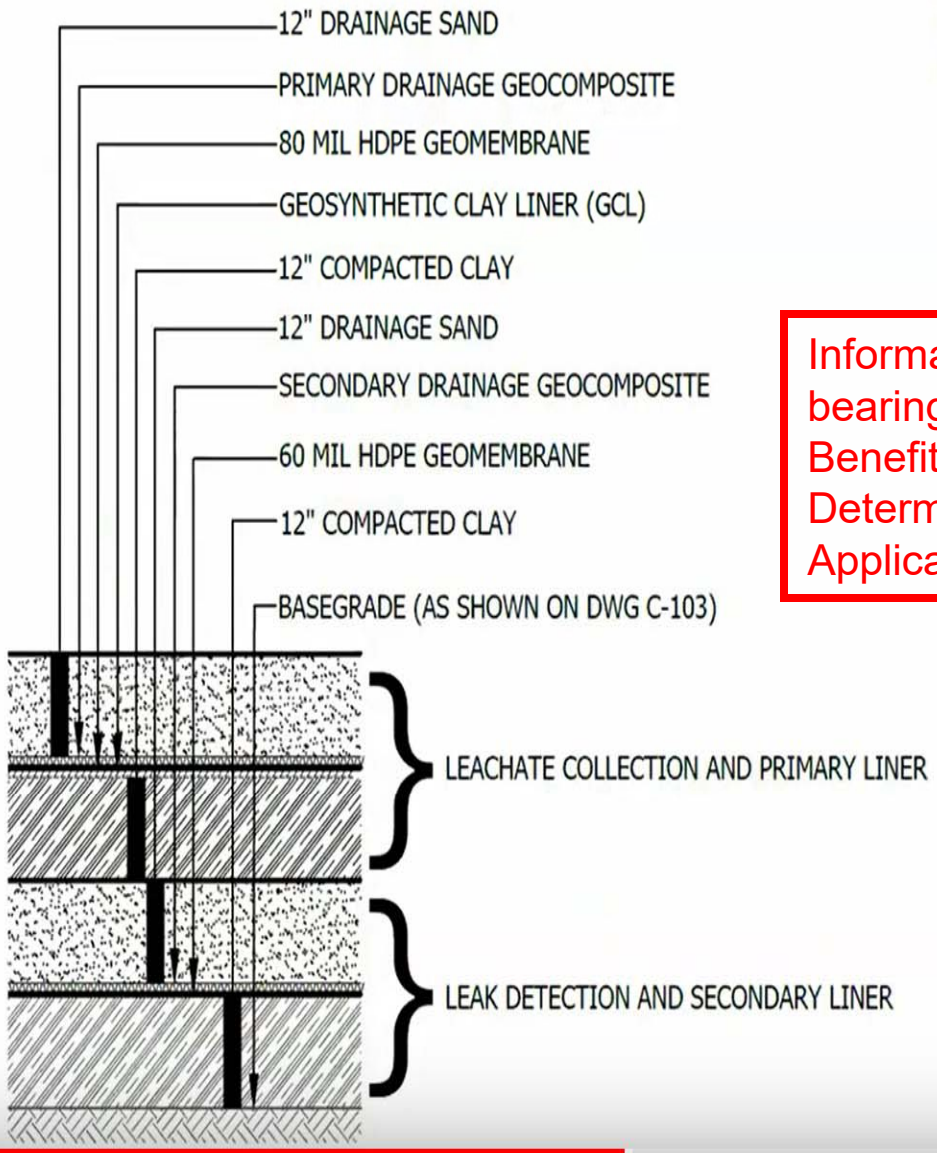


Proposed Expansion

2024 - KAT



Landfill's 4-foot thick, Dual-Liner System



Information has no bearing on Public Benefit Determination Application ~ KAT

Towns must provide for disposal of waste

Information has no bearing on Public Benefit Determination Application ~ KAT

Title 38: WATERS AND NAVIGATION

Chapter 13: WASTE MANAGEMENT

Subchapter 1: GENERAL PROVISIONS

§1305. Municipalities; powers and duties

1. Disposal services. Each municipality shall provide solid waste disposal services for domestic and commercial solid waste generated within the municipality and may provide these services for industrial wastes and sewage treatment plant sludge.

- Became law in 1989.

Information has no bearing on Public Benefit Determination Application. Puts burden of waste diversion management on municipalities not the state ~ KAT

§1310-E-1. Closure of landfills

Notwithstanding closure schedules previously established by rule, unlicensed and licensed open-municipal solid waste landfills that have not been closed must be closed in accordance with the schedule established by federal law or rule; state law or rule; schedules of compliance; consent agreements; enforcement orders; or license conditions.

- Became law in 1993.
- Four hundred "town dumps" were closed.
- A few towns retained acceptable landfills.
- The state decided on a regional waste disposal policy.

Information has no bearing on Public Benefit Determination Application.
Does not relieve municipalities from responsibility of waste diversion management
~ KAT

For more accurate numbers see 2024 MMMP Pg 33-43

https://www.maine.gov/tools/whatsnew/attach.php?id=12222463&an=1 ~ KAT

Waste[1] Tonnage Disposed in Maine in 2022[2]

Member towns only		
Mid-Coast (CDD only)	landfill	0.1%
Rockland	landfill	0.1%
Bath	landfill	1.3%
Several small CDD Landfills	landfill	2.8%
Augusta	landfill	3.0%
Aroostook Waste Solutions	landfill	3.5%
TOTAL		**10.7%**

(1) Total waste, not including recycling.

(2) Interpreted from Maine Materials Management Plan: 2024 State Waste Management and Recycling Plan Update and 2022 Waste Generation and Disposal Capacity Report, January 2024.

Fact Check – This data only shows that JRL is being used for disposal rather than local facilities **exploiting the loophole of unlimited 'temporary bypass'** ~ KAT

Waste Tonnage Disposed in Maine in 2022[1,2] – Pay for Dis

Hartland	landfill	0.2%	
MMWAC (Auburn)/Lewiston	Incinerator/landfill	4.8%	
EPEC (PERC) (Orrington)[3] /JRL	Incinerator /landfill	5.7%	
ecomaine (South Portland)	Incinerator/landfill	10.7%	
Cross Roads (Norridgewock)	landfill	16.6%	38% all others
Juniper Ridge (Old Town)	landfill	51.3%	51.3% JRL
TOTAL		89.3%	

(1) Interpreted from Maine Materials Management Plan: 2024 State Waste Management and Recycling Plan Update and 2022 Waste Generation and Disposal Capacity Report, January 2024.

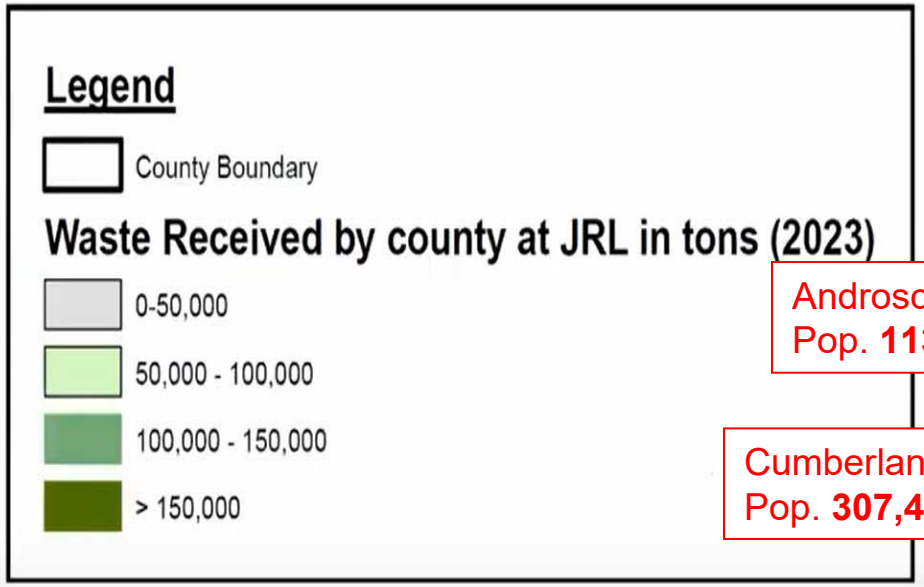
(2) MRC/Innovative (Fiberight) in Hampden has been closed since May 2020.

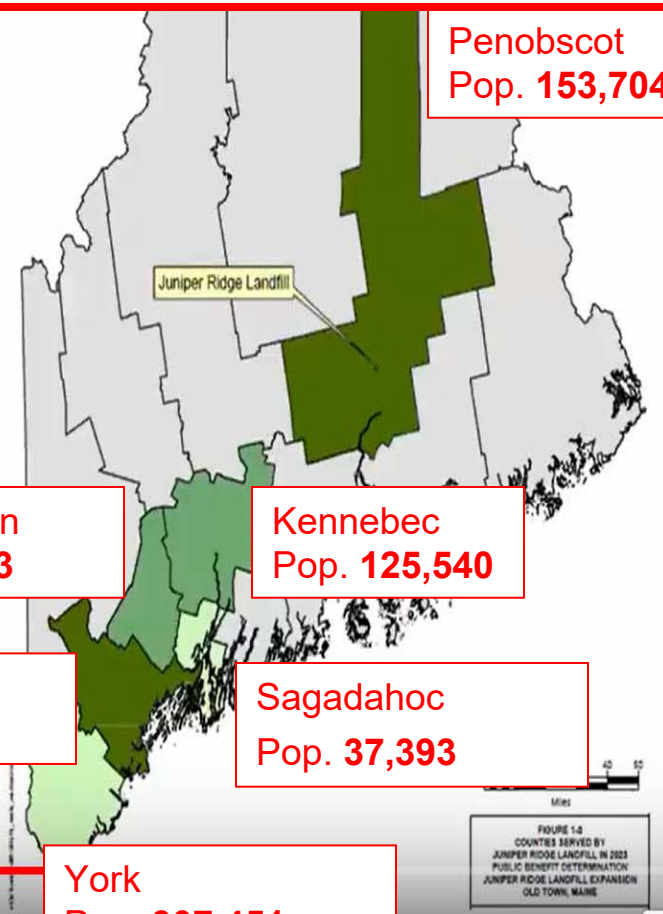
(3) EPEC has been closed since May 2023.

YouTube Home

Every county in Maine uses the Juniper Ridge Landfill

Cumberland and York Counties account for more waste than **all other counties combined**. Affluent enough to manage all locally generated waste within their area ~ KAT





Penobscot
Pop. **153,704**

Androscoggin
Pop. **113,023**

Kennebec
Pop. **125,540**

Cumberland
Pop. **307,451**

Sagadahoc
Pop. **37,393**

York
Pop. **307,451**

2:02:00 / 3:04:05

Critical to the State's 10-year waste disposal needs

JRL is the "Last Resort" for disposal so should not be calculated into waste disposal strategies except in the case of a **temporary shutdown** of MRF's
~ KAT

- At 51.3% of the waste disposed of in Maine, Juniper Ridge L is critical to meeting the State's 10-year waste management needs.

Maine already has at least 10 years of remaining landfill capacity.
See *Excerpts from 2024 Maine Materials Management Plan* or Pg. 41 of 2024 MMMP

- Juniper Ridge Landfill supports other facilities in Maine by taking bypass waste, ash, and residuals - essentially what's left over.
- The Juniper Ridge Landfill is the last resort for many towns with PERC and Fiberight agreements.
- Without the Expansion, every other pay-to-dispose facility would need to expand to take more than double what they take now.
- Expansion of Juniper Ridge Landfill is a public need.

Fact Check – Unprocessed MSW, **not just leftovers,** is now going to JRL from **all counties**. Pay to Dispose expansion statement is made without listing the total remaining licensable capacity in each facility. Based on **estimated future disposal volumes** a more sustainable plan would be to **expand local public facilities as needed** rather than **relying on one landfill for the entire state**.

How soon is the capacity needed?

Total Remaining Permitted Capacity at Juniper Ridge Landfill

Year	Cubic Yards
2021	7,294,907
2022	6,332,172
2023	5,356,397
2024*	4,306,676
2025*	3,256,956
2026*	2,207,235
2027*	1,157,514
2028*	107,793

Misleading. **Future Disposal** rates are hypothetical and may be reduced as soon as 2025 if only one variable changes Ex: **reducing or diverting food waste or unprocessed MSW as bypass**, may nearly double the remaining capacity JRL.

Establishing an energy subsidy, along with Renewable Energy Credits for WtE Anaerobic Digesters would make this form of waste diversion sustainable and beneficial.

~ KAT

* 2024 to 2028 based on estimated future disposal volumes

Remaining Capacity of All Landfills in M

Year	Cubic yards (CY)
2022	17,792,907
2023	16,125,134
2024	14,457,361
2025	12,789,588
2026	11,121,815
2027	9,454,042
2028	7,786,269
2029	6,118,496
2030	4,450,723
2031	2,782,950
2032	1,115,177

Assumes 1,667,773 CY used in 2022 and subsequent years.

Quantities and usage rates based on the MEDEP's 2020/2021 Capacity Report and 2022 Materials Management Plan.

Outdated - Quantities may be reduced as soon as 2025 ~ KAT

Juniper Ridge Landfill, including the Expansion, is consistent with the State's Solid Waste Management Hierarchy

Incorrect: Promotes landfill as a solution rather than waste diversion efforts ~ KAT

- Provides a place to dispose of material that cannot b
processed by incinerators, volume reduction facilities, or recycling programs.

Need **mandatory volume reduction processing** in place, and **local** landfill disposal capacity available, to qualify for using JRL as a "last resort". Otherwise no incentive to divert.

- Provides back-up when those facilities are not operating, (including MMWAC and ecomaine).

Unprocessed MSW allowed through 'bypass loophole'

- Provides a place for material that cannot be used as feed for waste-to-energy facilities or composted.

This material should be disposed of locally as unprocessed MSW.
WtE unavailable except through ecomaine

- Will produce and distribute Renewable Natural Gas.

Currently unavailable

- Casella runs their Zero-Sort recycling operation, which reduces disposal volume.

Underutilized / low participation
Unavailable - more expensive than landfill

Waste Types Accepted at Juniper Ridge Landfill

Unless these materials are banned from other local facilities, this information has no bearing on Public Benefit Determination Application for JRL expansion.

~ KAT

- Air and Water Filtration Media
- Approved Land Utilization Wastes
- Asbestos (non-friable)
- Biomass Boiler Ash
- Biomedical Incinerator Ash
- Burned Railroad Ties and Associated Ash
- Catch Basin Grit
- Clean Wood Open Burn Ash
- Construction and Demolition Debris
- Contaminated Soil
- Laundry Sludge
- MSW (bypassed from Maine WTE and waste processing facilities)
- Manufacturing Wastes
- Invasive Plant Species
- Leather Scrap Waste
- MSW Incinerator Ash
- Non-Hazardous Chemical Products
- Off-Spec Foods and Off-Spec Products
- Dead Animal Carcasses (on a case-by-case basis)
- Pigeon Waste

- Oversized Bulky Wastes
- Dredged Spoils from Waterways
- Dried Paint Residue and Related Debris
- Filter Press Cake and Collagen Scrapings
- Filter Media – Ambient and Non-Ambient Sources
- Fossil Fuel Boiler Ashes
- Gasoline Contaminated Soil and Debris Surface Spill
- Gasoline Contaminated Soil and Debris (Underground Storage Tank)
- Pulp & Paper Mill Sludge
- Sandblast Grit
- Sulfur Scrubbing Residue
- Treated Biomedical Waste
- Virgin Petroleum Product Contaminated Debris
- Urban Fill-Type Soils
- Waste Oil Contaminated Soil and Debris (Oily Debris)
- WWTP Sludge
- Water Treatment Plant Sludge
- Grit Screening Waste

- Juniper Ridge Landfill DOES NOT take hazardous waste.

Incorrect - PFAS is considered "hazardous waste" https://www.epa.gov/superfund/questions-and-answers-about-designation-pfoa-and-pfos-hazardous-substances-under-cercla ~ KAT

- Juniper Ridge Landfill DOES NOT take municipal solid waste, except when another facility is unable to process it.

Inaccurate – more unprocessed MSW in the last three years through 'bypass loophole' ~ KAT

- Juniper Ridge Landfill provides disposal reliability for many towns when their primary facilities go down.

Redundant ~ KAT

- Given the processing issues at PERC and Fiberight, Juniper Ridge Landfill is currently the last resort for waste disposal for many towns.

Misleading - PERC and Coastal Resources have been closed and/or underperforming for years having minimal impact on York, Cumberland, Androscoggin, Kennebec, Sagadahoc counties' MSW volume ~ KAT

Wastewater Treatment Plant Sludge

- In April 2022, the State Legislature banned the land spreading of wastewater treatment plant (WWTP) sludge.

- Because of the ban, 90% of Maine's WWTP sludge now goes to Juniper Ridge Landfill.

Drying facilities will make sludge disposal more stable reducing volume an estimated 80% and eliminated the need for OoS OBW. - KAT

Juniper Ridge Landfill is consistent with the State's Environmental Justice Goals

400(1)(TT-1) Definition of Environmental Justice ~ KAT

"Environmental justice" means the right to be protected from environmental pollution and to live in and enjoy a clean and healthful environment regardless of ancestry, class, disability, ethnicity, income, national origin, or religion.

Environmental justice includes the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of waste management laws, regulations, and licensing decisions."

- Juniper Ridge Landfill has a long history of depen operations and compliance with environmental and safety regulations.

Casella has a long history of exploiting rural New England for landfills - KAT

- Groundwater and surface water are tested three times per year to ensure compliance.

PFAS contaminated leachate dumped into Penobscot River - KAT

- Air emissions are constantly monitored.

But not corrected. Additional monitoring by DEP in 2025 - KAT

- The host communities (Old Town and Alton) receive $2.6 million in Host Community Benefits.

Unclear on how this represents Environmental Justice - KAT

- The neighbors of the landfill receive property tax reimbursement and a property value guarantee.

Does not qualify as Environmental Justice since it is **compensation** rather than **prevention** - KAT

- Casella will conduct more public informational meetings during the design process than required, ensuring the public has the opportunity to understand the project and know how to participate in the licensing process.

Public Comments and Testimony have had little success in preventing Casella's previous requests for expansion - KAT

- Casella will provide funding for area scholarship opportunities, similar to the educational benefit they have successfully instituted at a landfill in New York that is publicly owned and operated by Casella.

Not Environmental Justice. An education will not offset the harm done by damaging students' environment in the first place - KAT

The State has an obligation to provide for waste disposal

A single mega landfill should not be the primary solution - KAT

The Expansion is needed

Landfill is not **needed** but **chosen**. **Waste Diversion Solutions are needed** instead to avoid landfill expansion that only encourages *Buy and Toss* habits
Solution: **make landfill the most expensive and restrictive option** - KAT

- **§1310-X. Future commercial waste disposal facilities**

Unclear why this pertains to JRL expansion since it's been **35 years since enactment**. JRL was established in 2003

1. New facilities. Notwithstanding Title 1, section 302, the department may not approve an application for a new commercial solid waste disposal or biomedical waste disposal or treatment facility after September 30, 1989, including any applications pending before the department on or after September 30, 1989.

Key word is "commercial"; publicly owned facilities are allowed but not subsidized by government. Most towns cannot afford to implement their own MRF or landfill
Commercial landfills were banned to prevent importing OoS waste - KAT

The Expansion is needed

Redundant slide - KAT

From the Maine Materials Management P
published by the MEDEP (January 2024):

Taken out of context from **2024 MMMP Pg 42 D** under "***Projected*** Demand for Capacity" https://www.maine.gov/tools/whatsnew/attach.php?id=12222463&an=1 - KAT

"Statewide, ..., Maine appears to have adequate capacity for at least 10 years before several landfill facilities reach their capacity. This assumes however that an expansion license application is both received by and approved by the Department for the JRL facility. As of the date of this report, the Department has received a PIR from JRL for a future expansion. The loss of JRL as a disposal facility would create catastrophic capacity issues as it receives over 50 percent of all material landfilled in Maine annually."

Jay landfill is estimated to provide equivalent capacity ~ KAT

Jay would preserve remaining JRL capacity for future potential expansion if needed ~ KAT

Biosolids Report prepared by Brown and Caldwe (December 2023):

https://brownandcaldwell.com/papers-and-reports/an-evaluation-of-biosolids-management-in-maine-and-recommendations-for-the-future/

- States that without the additional capacity from an expansion at JRL, "the state faces a dire situation."
- Recommends that "the State work with [Casella] to ensure that an application [to expand JRL] is submitted as soon as possible."

See full report at https://www.maine.gov/tools/whatsnew/attach.php?id=12198306&an=1

- Concludes that expansion is critical – if JRL were not expanded, "there will be no Maine landfill with enough capacity to meet solid waste needs and much of the biosolids produced will need to be sent out of state and greatly increased cost for utilities and ratepayers."

Out of context – **bio-solid diversion from JRL underway and expanding in 2025**. Jay and **other landfills willing to take WWTS** referenced on **Pgs 21 & 53** of B&C report - KAT

In Summary,
Expansion of the Juniper Ridge Landfill:

- Meets a public need, and therefore provides a public benefit;
- Is critical to meeting the State's 10-year waste goals ;
- Is the landfill of last resort for many towns;
- Helps the Towns meet their legal responsibility to provide for waste disposal; and
- Helps the State meet its obligation to provide for waste disposal now that no new commercial facilities can be licensed.

At this time expansion is not needed. **Waste diversion efforts** are expected to come **online in 2025** greatly reducing MSW volume and bio-solid disposal. Publicly owned facilities should replace commercial since OoS waste is a major contributor to the decline in capacity - KAT