WASHINGTON
REFUSE &
RECYCLING
ASSOCIATION

October 30, 2026

Dan Weston
Recycling Reform Act Lead
Ecology Solid Waste Management Program
Washington Department of Ecology

Re: Preliminary Needs Assessment Comments from the Washington Refuse & Recycling Association (WRRA)

Dear Mr. Weston:

The Washington Refuse and Recycling Association (WRRA) appreciates the opportunity to provide comments on the Department of Ecology's (Ecology) Preliminary Needs Assessment. WRRA is the longest-serving solid waste and recycling trade association on the West Coast, representing the private-sector solid waste, recycling, and composting industry throughout Washington State since 1947. Our members provide essential public health and environmental protection services, including the collection, transportation, and processing of municipal solid waste and source-separated recyclables and organics.

WRRA's membership includes the essential service providers that will collect and process covered products under Washington's Recycling Reform Act (RRA). WRRA offers the following comments with an emphasis on building upon the Preliminary Needs Assessment to ensure the success of the Full Needs Assessment next year.

WRRA General Comment Summary:

- Proprietary Data Challenges & Confidentiality: Tight registration deadlines, voluminous data requests, and unclear expectations around reporting and confidentiality created significant challenges for service providers. WRRA seeks to partner on stronger confidentiality protections, and third-party verification and reporting to protect commercially sensitive information and restore industry confidence.
- Steps & Changes for Full Needs Assessment: The Full Needs Assessment should prioritize key data gaps, particularly producer data on covered products sold into the state, to compare materials entering Washington's marketplace with materials recovered through the recycling system. Ecology should also standardize data definitions, reporting methods, and metrics across jurisdictions and companies to improve data quality and enable meaningful comparisons.

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- Clarify Expectations: The Full Needs Assessment should clarify service expectations, infrastructure investments, reimbursement timing, and realistic implementation milestones, particularly given the anticipated 2030 requirements and lack of producer funding prior to 2030.

Service Costs

- The assessment correctly documents challenges in determining recycling costs due to inconsistent contracts, terminology, reporting practices, and the classification of multifamily services; future data collection should be standardized and supplemented with publicly available customer rates.
- The Full Needs Assessment should improve estimates of participation and set-out rates, look forward and assume higher documented costs in central and eastern Washington in the future, and establish forward-looking reimbursement rates that account for inflation, regional differences, operational expenses, and the investments required to expand service.

Covered Materials Collected

- Recycling performance evaluations should account for contamination, residual waste streams, and covered products collected in quantities too small to be economically or sustainably processed and brought to market.
- Ecology should coordinate future Needs Assessments with its waste characterization studies to ensure analyses use current, relevant data and accurately reflect material composition and management practices.

Service Levels & Availability

- The Full Needs Assessment should address inconsistent classifications of multifamily services and explain how these differences affect service availability, participation estimates, and data reliability. Detailed geographic maps of new service areas should be included in the Full Needs Assessment.

Processing Capacity

- Compost facilities experience significant contamination (plastics, metals) derived from covered products in the organics stream
- reimbursement for managing contamination from compostable covered products and non-compostable covered products that enter the organics stream as contamination. The Full Needs Assessment should also document gaps and needed investments to expand acceptance of compostable products.
- Ecology should conduct a comprehensive assessment of statewide transfer-station drop-off recycling, including extended surveys, facility interviews, site visits, and standardized reporting metrics.

E. Current Markets

- The Full Needs Assessment should recognize that recycling markets operate nationally and internationally and consider the National Responsible End Market (REM) Standard developed by Circular Action Alliance (CAA), rather than unnecessarily restricting viable markets by geography.
- Ecology should evaluate the economic and environmental viability of recycling low-volume materials, incorporate the previously proposed analysis of post-consumer recycled content (PCRC) market capacity, and assess PCRC targets that could support sustainable end markets for recovered materials.

I. WRRA General Comments on the Preliminary Needs Assessment:

A. Proprietary Data Challenges & Confidentiality

Tight Timelines for Registration and Surveys:

- WRRA and its membership appreciated the early communication with Ecology staff and the opportunity to review, test, and provide feedback on certain components of the new registration system. However, service providers were asked to report prior-year data beginning in January of the following year, with very tight submission timelines. Following service provider registration, members also faced challenges related to the timing, scope, and coordination of subsequent data requests/surveys. Throughout the process, WRRA advocated for strong confidentiality protections and processes to prevent disclosure of commercially sensitive, proprietary data.
- **Scope of Data Requests and Consistency:** WRRA members also received multiple questions and data requests that raised concerns regarding the scope, level of detail, and consistency of reporting expectations.
- **Challenges with NDAs and Confidentiality Protections:**
    - **Proprietary and Sensitive Data:** The requested information includes commercially sensitive and proprietary business data. Commercial collection data, including multifamily collection data, and materials recovery facility (MRF) data are particularly sensitive due to their potential competitive implications.
    - **Nondisclosure Agreements (NDAs) and Updates:** In June, WRRA was made aware that Non-Disclosure Agreements signed with Ecology's consultants conducting the Needs Assessment under the RRA (Eastern Research Group, HRD Consulting, etc.) may not provide the full protections against disclosure that were anticipated after Ecology's consultation with public records staff. Washington's Public Records Act (PRA) is expansive, and Ecology raised concerns with WRRA

staff on 6/16 that its internal PRA staff had indicated additional action may be needed to protect confidentiality.

- **Pending Confidentiality Petition:** In June, WRRA filed a global petition to protect confidential information submitted by WRRA members in response to the surveys following a process suggested by Ecology staff. On 7/14 WRRA finalized its petition and provided supporting arguments for each field designated confidential. Ecology staff will review the petitions and arguments before making a final decision on each field claimed confidential. Ecology staff has informed WRRA that all fields will be protected from disclosure while under review. Note: WRRA members that submit data outside designated survey fields will need to file a separate petition to protect that data. WRRA has also worked with Ecology's consultants conducting the Needs Assessment on updated NDAs that require notice of a public records request and has facilitated responses and NDAs with its membership.

Industry Confidence and Process Transparency: Unanticipated changes to confidentiality protections and evolving requirements have created uncertainty and undermined industry confidence in the process. Clearer communication about data requirements, confidentiality protections, and potential changes—combined with meaningful opportunities for industry input—would help build trust and support more effective implementation. WRRA continues to advocate for stronger confidentiality and a third-party verification and reporting process.

B. Steps & Changes for Full Needs Assessment

- Identify Key Gaps: Build around available data, identify key gaps and emphasize work for the Full Needs Assessment as an instructive deliverable.
  - **Producer data**: The central data gap under the RRA is producer-side data showing how much packaging is sold into Washington State. Washington already has substantial data on the material entering the recycling system, including annual Ecology reports, reports submitted to local governments, and Ecology's waste and recycling characterization studies. These sources provide a strong foundation for understanding the volume and composition of material reaching MRFs.
    - What is missing is the corresponding measure of how much packaging enters the state's marketplace in the first place which producers are now beginning to report. In the past, Washington has relied on modeled estimates from studies, but it will now have access to true producer-side data. With reliable producer-side data, Washington could compare the amount of packaging sold in the state against the amount recovered through the recycling system. This would establish a clear denominator (packaging sold into Washington) and numerator (material managed by

MRFs), allowing for more meaningful comparisons of recovery rates, material-specific performance, and the effectiveness of the state's recycling system.

- **Data Normalization / Standardized Metrics:** The Preliminary Needs Assessment documents many longstanding challenges with large-scale data collection efforts related to solid waste in Washington. Jurisdictions and companies both keep data in different forms which makes "apples to apples" comparisons impossible and other data inconsistencies prevent the establishment of clear jurisdictional lines or boundaries for evaluation. Now that the landscape of these challenges has been documented, WRRA hopes to work with Ecology on proactive steps to increase harmonization and data quality for future efforts.

C. Clarify Expectations:

- **Better Timelines & Time to Respond:** The first year of RRA implementation included Service Provider Registration and a series of surveys for service providers, which requested prior-year data in the first months of the following calendar year, all within extremely short response windows (which had to be extended).
  - Future implementation years will benefit from longer announcement periods and more generous response windows.
- **Confidentiality:** As previously discussed, the first year of RRA implementation presented many challenges and surprises regarding the confidentiality service providers expected.
  - WRRA ultimately supports third party verification and reporting for sensitive data submitted as part of RRA implementation and urges Ecology to consider and adopt a third-party verification process.
- **Reimbursement & Timing:**
  - As written, the RRA anticipates that "beginning January 1, 2030" recycling programs shall "Provide curbside collection of source-separated recyclable materials from single-family and multiple-family residences wherever curbside garbage collection services are provided to these entities." (RCW 70A.205.045(b)(i)(B))
  - Throughout the implementation process, stakeholders have used the metaphor of "EPR as a dial" to describe implementation as a ramp-up process and to reflect the reality that program reimbursement (the funding for improvements anticipated with the RRA) does not flow until after the first Producer Responsibility Organization (PRO) Plan, around 2030.
  - During the 10/8 Advisory Committee meeting the timing of investments and funding was discussed by multiple stakeholders, and the discussion

memorialized the problem: the RRA is intended to improve recycling using producer funding, but that funding does not begin until after, or very near, when the program is anticipated to begin in 2030

- The Full Needs Assessment must clarify what services are expected to be online and deployed both for MRFs and for curbside collection service providers. The RRA anticipates a new statewide list of materials collected in most communities throughout Washington but many MRFs may require upgrades or investment to process the materials on the statewide list. Similarly, curbside service providers may require new trucks, containers, employees, or other equipment to collect the materials. The Full Needs Assessment should explain what is expected in the first years of program implementation during the first PRO Plan period as funding and investments begin to flow, clarify what is meant by the metaphor of "EPR as a dial," and lay out realistic timelines for when to expect new investments and thus new services.

II. Section-Specific WRRA Comments:

A. WRRA Comments on Service Costs:

- Documenting Data Challenges: Overall the memo accurately memorializes the difficulties in apportioning recycling system costs, particularly under municipal contracts, due to both contract structure and lack of consistency across jurisdictions, municipalities, and companies.
    - Obtaining Documents / Lack of Detail: The report also correctly characterizes the challenges in obtaining and reviewing contracts and determining current operations from contracts and local solid waste plans alone. The report correctly notes that some contractual arrangements lack specificity on certain terms and may rely on the longstanding understanding of the parties in their execution, and that local solid waste plans lack standardization.
    - Inconsistent Terms: The report also correctly notes the challenge created by varying terminology among contracts, jurisdictions, and companies as well as varying methodologies for tracking and keeping data.
    - Multifamily Challenges: Similar to inconsistent terms, the report correctly characterizes how multifamily collection is often treated as commercial collection in many localities, creating another barrier to determining costs
    - Inconsistent Reporting & Moving Forward: The report also notes, at page 15, that some service providers reported cost data in both Ecology's Service Provider registration and Needs Assessment surveys, and in some cases the data was conflicting, but it partially attributes the discrepancy to variations in survey questions and company recordkeeping practices. Moving forward, aligning

service provider registration (and how costs are tracked in that system) with future surveys and other data-gathering activities will help mitigate these challenges.

- Challenges with Confidentiality: See previous section for comments and concerns related to confidentiality and the Full Needs Assessment.
- Producer Data: See previous section for discussion of the role of producer data in the Full Needs Assessment.
- Public Cost Information: Overall, the Preliminary Needs Assessment appears to operate under the assumption that the end rate paid by the consumer covers the full cost of providing service, including costs, profits, taxes and other fees. For residential service, customer rates are publicly available data and can be found through Utilities and Transportation Commission (UTC) tariffs, city websites, and municipal contracts. Ecology could use this publicly available information along with other data points for stronger estimates in the Full Needs Assessment.
- Set out / Participation rate: Understanding recycling participation and set-out rates could be helpful in estimating system costs. There are now better estimates of the number of households eligible for curbside recycling, but not of how many actively participate or more precisely, how frequently participating households set out their recycling. Better data collection and the use of emerging tools can help address these gaps and provide a clearer picture of recycling activity across regions. For example, partnerships with organizations such as The Recycling Partnership and the use of technologies such as AI and cameras on collection trucks could help measure participation, identify opportunities to increase recycling, and better understand household set-out behavior. Cities and counties may already collect or support access to some of this information, creating opportunities to build on existing efforts and share data more consistently.
    - For multifamily properties, local governments and other stakeholders will likely be essential partners in identifying specific properties eligible for service as well as evaluating resident participation.

- Estimated Costs: The report calculated an estimated cost per ton for recycling in various regions of Washington, but noted deficiencies in the available data and expressed low confidence in the estimate.

Table 8. Average annual total recycling cost per ton by region.

Geography	Average recycling	Recycling range	Data points
Southwest	$558.64	$64–$1,179	53
Northwest	$357.51	$69–$1,713	17
Central	$504.95	$111–$2,008	9
Eastern	$383.54	$80–$547	21
Total Statewide	$431.94	$64–$2,008	100

Source: Collection service cost analysis. "Data points" are the observations retained for the cost analysis; they should not be assumed to be distinct service providers or jurisdictions. The overall average is not a complete statewide annual cost estimate.

- Central / Eastern Costs may be low: At Table 7, the report provides average cost-per-ton ranges for each of the regions in Washington. WRRA questions the cost

ranges, particularly for eastern and central Washington, which have a higher percentage of rural communities, longer distances to MRFs, higher fuel costs, etc.

- Central and Eastern Costs will increase significantly going forward: Additionally, while the calculated cost ranges could be accurate for costs in central / eastern region communities with recycling, end costs under the RRA will likely be much higher in those regions as curbside recycling service expands to more rural communities. Future estimates should account for these increasing costs as the system builds out to meet the RRA standard and provide curbside recycling wherever curbside waste is provided.
- Costs will increase in all regions going forward: Costs will increase across all regions over time. Today's costs are not representative of the costs providers will face in 2030 and beyond. Ongoing inflation and broader economic disruptions, including higher fuel prices, rising labor costs, and increasing costs for parts, equipment, maintenance, and operations, will continue to put upward pressure on curbside recycling service costs. It is therefore critical to clearly define what costs are included in the reimbursement rate and to ensure the methodology used to establish rates reflects the full and evolving costs of providing service. All curbside recycling service providers will need to make significant investments to meet the new goals of the RRA. Reimbursement rates should be forward-looking and regularly adjusted to account for inflation, changes in labor and equipment costs, new policies and mandates, and the financial impacts of the RRA's accelerated implementation timeline. Using current costs as the basis for future reimbursement without appropriate adjustments will underestimate the resources needed to maintain reliable service, bring new services online, and achieve the RRA's objectives.

B. WRRA Comments on Covered Materials Collected:

Low Volume Covered Products / Contamination:

- Performance evaluation should include evaluation of contamination and of materials that are contaminants in the MRF process or are recoverable but represent such a small amount of material that the covered product effectively becomes contamination because it cannot be economically and sustainably collected and processed.

Residual Stream & Covered Products:

- Performance evaluation should include an analysis of residual streams to help determine covered products that are difficult to capture through MRF systems.

Align Needs Assessments with Waste Characterization:

- Future needs assessments conducted under the RRA should align with the most recent waste characterization studies published by Ecology to ensure assessments rely on current, relevant data. Ecology currently updates its waste characterization study on a five-year cycle, which may not align with the timing of future RRA needs assessments.

As a result, assessments may have to rely on outdated data that does not accurately reflect current waste generation, composition, and management practices.

- WRRA recommends that Ecology adjust its internal timelines for conducting waste characterization studies to better coordinate with future RRA needs assessments. Aligning these efforts would help ensure that each assessment incorporates the most recent available data, improves the accuracy of its findings, and provides a stronger basis for evaluating system needs and informing future policy and statewide implementation decisions.

C. WRRA Comments on Service Levels & Availability:

Commercial / Residential Distinction & Multifamily:

- Definitions for multifamily service vary across localities and could create inconsistencies in the final data. Whether multifamily service is classified as commercial or residential varies across jurisdictions, service contracts, and UTC tariffs.
- The memo did not address this issue or note that the team encountered or addressed this inconsistency, which could skew results.
- The final memo should note the variation in multifamily classifications and explain how the team accounted for those differences
- Addressing multifamily participation rates will be a persistent challenge due to how multifamily services are obtained (usually at the discretion of the property manager, for all tenants at a property) and the more sensitive nature of data associated with multifamily collection (multifamily properties are often considered commercial service, and unregulated commercial data presents greater proprietary and antitrust risks if disclosed).

More Specific Geographic Areas:

- The RRA requires curbside recycling service wherever curbside waste is provided, and the memo includes a helpful diagram at Figure 8 on page 45 that documents areas with garbage collection but no curbside recycling collection.
- The memo memorializes the % of customers with curbside waste and recycling across the four regions in Washington but does not identify the specific communities or geographic areas where curbside recycling will need to be provided.
- The Full Needs Assessment should include a more detailed zoomable map with specific geographic boundaries. The current map is helpful but simply a statewide snapshot. A similar map would also be a useful resource for organics collection going forward.

Public Space Recycling:

- Page 58 discusses "co-location of recycling and waste collection containers" for public space recycling and recommends co-locating both types of containers as a best practice.

- The "two-box" approach should be included in the final recommendations. The recommendations should expressly support co-locating waste and recycling containers in public spaces to make recycling more convenient, provide a clear disposal option, and support consistent public participation in recycling programs.

Organics Participation Rates:

- Anecdotally, WRRA members have reported that, overall, in jurisdictions with optional recycling and organics subscription service, recycling subscription levels are likely higher than organics subscription levels as a matter of course, and recycling programs likely have a higher overall participation rate than curbside organics collection programs.

D. WRRA Comments on Processing Capacity:

Compostables Capacity Depends on Facility Acceptance Criteria:

- Available capacity must reflect facilities that actually accept compostable materials, not simply theoretical processing capacity. Many composting facilities have chosen not to accept compostable products due to operational, processing, contamination, or market considerations. The analysis should assess current facility participation and interest in accepting these products to accurately determine accessible capacity and avoid overstating the state's ability to manage them.

Compostable Products & Contamination:

- Compostable products can contribute to contamination at composting facilities when they are difficult to distinguish from conventional plastics or are not accepted by the facility's processing system. Their presence can lead consumers to mistakenly place non-compostable items in compost bins, increasing the risk of contamination from conventional plastics and other improperly disposed materials. Simply put, allowing items like service ware in organics streams invites similar packaging, regardless of whether the materials are compostable.
- Contamination is difficult and costly to manage, and the burden falls on composting facilities through hand-sorting, load inspection, and rejecting or disposing of contaminated loads. The Needs Assessment accounts for none of this when it tallies system capacity. Taking on new material, including compostable packaging, will also require new infrastructure investment and additional staffing at facilities; those costs need to be spelled out, and existing permitted capacity should not be treated as a given. California's Circular Action Alliance (CAA) program plan faced this same issue for compostables and, citing the difficulty of securing capital investment for new or upgraded facilities, chose gradual expansion of acceptance over funding new capacity (Circular Action Alliance, California EPR Program Plan, Ch. 4, "Strategy for Compostable Covered Materials," at 187, 191, 195-197). Washington's Needs

Assessment should not assume the investment and staffing costs will simply be absorbed.

Contamination Reimbursement:

- Under the RRA, reimbursement rates must account for the costs of removing and managing contamination associated with covered materials at recycling and composting facilities. Plastic, glass, metal, and other non-compostable packaging routinely enter composting facilities through organics collection programs which are often associated with covered products. The Full Needs Assessment should expressly evaluate contamination levels at composting facilities from covered products, identify the operational and financial impacts of managing non-compostable materials, and quantify the associated costs to the extent practicable. The Full Needs Assessment should address reimbursement methodologies for compost contamination that reflect these real-world costs rather than assume that existing facilities can absorb them within current operating budgets or permitted capacity.

Compostables capacity issues:

- Compostable packaging represents a very small share of the material collected at organics facilities.
- Capacity issues will not be the key issue for the acceptance of compostables but the Preliminary Needs Assessment does include some misconceptions about overall compost capacity in Washington that were better discussed by Ecology staff during development of the OML
    - In past webinars and rulemakings, Ecology's own staff have explained that permitted tonnage minus tons accepted doesn't equal remaining capacity, and that facilities processing yard debris see large seasonal swings (Western WA yard debris facilities often process about a quarter as much in February as in May); most facilities accepting mixed food and yard debris report operating at or near maximum capacity in peak season. None of this is reflected in the Needs Assessment's annual utilization figures.
    - The RRA covers only compostable covered materials, a small share of inbound feedstock, but the broader point is that Washington will need substantial additional organics capacity to meet the OML's 2030 diversion goal, and this Needs Assessment's annual numbers shouldn't be read as showing that surplus capacity exists in other contexts. The Full Needs Assessment should also accurately document seasonal capacity issues.

Drop-Off Recycling Survey at Transfer Stations:

- WRRA concurs that more analysis and study are needed on the capacity and current utilization of drop-off recycling at transfer stations throughout Washington. Ecology

should conduct a survey with an extended response period to assess drop-off recycling capacity, services, and utilization at transfer stations statewide. Individual facility interviews and site visits will likely be necessary to accurately assess capacity, as facilities vary in layout, operations, and available services.

- Establish a consistent method for tracking drop-off recycling tonnage to measure system utilization and the impact of drop-off programs and incorporate this effort into broader initiatives to standardize data collection and reporting across recycling service providers.

E. WRRA Comments on Current Markets

CAA National Responsible End Market Standard:

- The Full Needs Assessment should recognize and support CAA's efforts to develop a National Responsible End Market (REM) Standard that can be applied consistently across states implementing extended producer responsibility (EPR) programs. While the Preliminary Needs Assessment documented existing mills and recycling markets within Washington, recycling markets operate primarily on a national and international scale, with recyclable materials routinely transported across state and international borders to reach viable end markets. Washington's RRA should recognize these established market dynamics and avoid unnecessarily limiting the scope of available markets based on geographic boundaries.
    - Without markets, there can be no recycling. In this area, Washington should not try to distinguish itself from other states and would benefit from robust access to nationally tested recycling markets.
    - Over the summer, WRRA submitted comments, in conjunction with the National Waste & Recycling Association (NWRA), on CAA's National REM standard. WRRA supports a national approach that reflects the realities of recycling markets and offers our comments on the CAA standard as a reference.

Environmental Impact:

- The Full Needs Assessment should evaluate the economic and environmental sustainability of collecting and processing low-volume covered products, particularly where limited material quantities may not justify the infrastructure and transportation costs necessary to support recycling. This analysis should consider the volume of material generated and collected, the time required to accumulate sufficient quantities for economically viable transportation and processing, the costs and practical limitations of storing materials for extended periods, and the distance to available end markets. The assessment should also consider the life-cycle environmental impacts of collecting, storing, and transporting these materials, including transportation-related greenhouse gas emissions. Ultimately, the assessment should determine whether the quantities of material available and the existence of viable end markets justify the costs of collection and

processing infrastructure, and whether recycling these materials provides a meaningful net environmental benefit.

PCRC Analysis:

- The original "Material Quantity Memo" included Table 1, which documented differences between the Preliminary Needs Assessment and the Full Needs Assessment and emphasized an assessment of how much post-consumer recycled content (PCRC) the market can utilize. That analysis should be included and addressed under current markets as well.

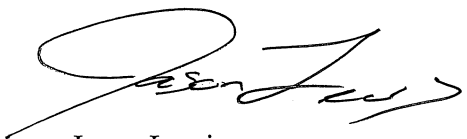
PCRC & Market Development:

- Consideration of PCRC requirements will be critical to the successful implementation of the RRA because effective recycling depends on sustainable end markets for recovered materials. Collecting and processing materials does not ensure successful recycling if those materials cannot be sold and used in new products. Domestic recycling markets, particularly for plastics, face significant challenges. Notably, facilities processing PET (#1), one of the higher-value recyclable resins, have been the subject of well-documented shutdowns across the country. Material quantity and market capacity issues are linked and should be addressed in the Full Needs Assessment as discussed in Table 1 of the original draft tech memo. The Full Needs Assessment should include an analysis of PCRC targets for the PRO to adopt, to help ensure sufficient markets for the covered products collected.

We look forward to continuing this dialogue, including through potential working sessions focused on the issues raised above, and welcome the opportunity to discuss any of our comments further with Ecology staff. As Ecology's work evolves and additional information becomes available, WRRA reserves the right to revise, supplement, or withdraw these comments and to raise additional concerns as appropriate.

Thank you for your consideration of these comments. Please reach out to our subject matter expert and In-house counsel Rod Whittaker at rod@wrra.org with any questions.

Sincerely,



Jason Lewis
Executive Director