

2022 Update to New Hampshire Solid Waste Management Plan  
DRAFT OUTLINE

## INTRODUCTION/BACKGROUND

*Purpose of the Plan* – As mandated under RSA 149-M:29, the purpose of this plan is to set out goals, strategies, and actions to reduce solid waste generation through source reduction and diversion methods, to achieve the state's solid waste disposal reduction goal, and to ensure adequate disposal capacity for waste generated in New Hampshire. The plan will provide a framework for NHDES and a range of solid waste stakeholders to support RSA 149-M, which was established to protect human health, preserve the natural environment, and conserve precious and dwindling natural resources through the proper and integrated management of solid waste. The plan will be used as a shared roadmap to ensure that New Hampshire's solid waste is managed sustainably.

*Statutory Authority* – brief overview of RSA 149-M and NHDES role in regulating solid waste

*New Hampshire's Waste Landscape and Statistics* – provide a high-level overview of current solid waste practices in NH (e.g., types of facilities, tons disposed, recycling figures, current waste disposal bans)

*Legislative Activity* – Solid waste has become a significant topic of interest for the public and the NH Legislature. This plan incorporates recommendations from the HB 617 legislative study committee and HB 413 Solid Waste Working Group.

*Vision for New Hampshire* – all sectors in NH (public, private, industrial, institutional, commercial, non-profit) must work together to achieve an economically and environmentally sustainable waste management system.

## GOALS, ACTIONS & STRATEGIES

*RSA 149-M:2* – Reduce the quantity by weight of solid waste disposed by 25% by the year 2030, and by 45% by the year 2050.

*RSA 149-M:3* – New Hampshire Waste Hierarchy

*RSA 149-M:29, I* requires that the state's solid waste plan contain, at a minimum, the following elements:

*(a) Goals, strategies, and actions to reduce solid waste generation through source reduction, to increase diversion through methods such as reuse, recycling, and composting, and to achieve the state's solid waste disposal reduction goal, with such efforts incorporating the principles of the solid waste management hierarchy established in RSA 149-M:3*

*(b) Discussion of opportunities to reduce solid waste generation through source reduction and increase diversion through methods such as recycling and composting.*

*(c) Goals, strategies, and actions necessary to maintain and ensure adequate disposal capacity for management of waste generated in New Hampshire.*

*Plan priorities* – The Solid Waste Management Plan (SWMP) prioritizes waste reduction and/or diversion of high-tonnage materials (food waste, C&D, glass, textiles, paper), as well as single-use products and packaging. Reducing the generation of waste combined with increased diversion (e.g., recycling & composting) will help to maintain adequate disposal capacity. Will be necessary to develop additional infrastructure and practices to support waste reduction and diversion in NH. This plan also recognizes the need to strengthen recycling markets, and that solid waste management programs and policies should support state and federal climate change and environmental justice initiatives, where feasible.

Goals:

- 1) Reduce the volume of the solid waste stream
- 2) Reduce the toxicity of the solid waste stream
- 3) Maximize the diversion of residential, commercial, and industrial solid waste from disposal
- 4) Ensure adequate capacity for management of NH-generated waste
- 5) Develop local markets for waste diversion
- 6) Encourage solid waste infrastructure and practices that address climate change
- 7) Ensure the environmental justice principles are incorporated into solid waste policies and regulations

The goals outlined in the Plan will be executed by a series of actions using various tools in our “Strategy Toolbox.”

*Strategy toolbox* (5) to achieve state goals:

- 1) Public outreach, education, and Technical Assistance
- 2) Incentive programs (e.g., grants, tax write-offs, public recognition, “green” certification)
- 3) Data collection and research
- 4) Regulatory updates
- 5) Legislation

***GOAL 1: Reduce the volume of the solid waste stream***

Reducing waste from the source leads to social, environmental, and economic benefits by decreasing the quantity of waste needing end-of-life management. Waste prevention involves “upstream” approaches that conserve resources, avoid costs, and relieve pressure on waste management infrastructure.

**PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE**

Action 1 – Educate residents, municipalities, and businesses about the NH Waste Management Hierarchy and develop simplified guidance on source reduction (*HB 617 Report Recommendation #4*).

Action 1 – Public outreach and education about individual consumer habits to encourage source reduction and reuse – proper food storage, buying in bulk, donating and buying used items (thrift stores/Habitat for Humanity ReStores), purchase planning.

Action 1 - Encourage the reuse of consumer goods. (e.g. – promote the return of packaging to a company for reuse, such as refillable glass beverage containers)

Action 1 – Public outreach and education about community-wide actions to encourage source reduction and reuse – yard sales, fix it/repair clinics, swap events.

Action 1 – Public outreach and education about reuse and donation of textiles.

Action 1 – Use the US EPA Food Recovery Hierarchy to conduct outreach that promotes food rescue and donation to address food insecurity and support local farmers. Put quality, edible food to its highest and best use. Promotion may involve using the Harvard Food Law & Policy Clinic fact sheets about food donation, date labels, feeding food scraps to animals, and tax incentives.

Action 1 – NHDES collaborate with the NH Department of Administrative Services Procurement and Support Services team to increase awareness and use of the Supply Redistribution Service (in support of [RSA 9-C](#)) available to state agencies and the public.

Action 1 – Assist schools with waste reduction strategies.

Action 1 – Use the US EPA Sustainable Materials Management Best Management Practices (BMP) to provide guidance and technical assistance to contractors about deconstruction of structures to support reuse of building materials and reduce generation of construction and demolition debris (C&D).

Action 1 – Promote the financial benefits for contractors who incorporate [U.S EPA sustainable building practices during C&D projects](#). Contractors can reduce their project expenses through avoided purchase/disposal costs. Practices may include preserving existing buildings, purchasing used and recycled products, using construction methods that allow disassembly and facilitate reuse of materials, reducing interior finishes, etc.

Action 1 – Conduct Manufacturing Facility Waste Management Audits for larger businesses and institutions to help identify possible opportunities for waste reduction. Audits may be conducted by NHDES, a procured consultant, or service provider.

#### LEGISLATION

Action 1 – Pursue legislation that would require NH Department of Health and Human Services to review and improve food safety regulations to reduce food waste and increase food recovery. (*HB617 Report Recommendation #10*)

Action 1 – Explore legislation that would require businesses and manufacturers to identify ways of reducing the amount of single-use plastic packaging for their products and enhance the recyclability of their packaging. (*HB617 Report Recommendation #15*)

Action 1 – Explore EPR programs to encourage manufacturers to improve product design and reduce unnecessary packaging.

**GOAL 2: Reduce the toxicity of the solid waste stream**

Reducing the toxicity of the solid waste stream requires source reduction of household hazardous wastes (HHW) and ensuring that end-of-life management options are consumer-friendly and protective of public health, safety, and the environment.

**PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE**

Action 2 – Public outreach and education about household-generated Universal Wastes (e.g., proper storage, safe disposal options, potential recycling/reuse).

Action 2 – Public outreach and education about the management of HHW (e.g., proper storage, safe disposal options, potential recycling/reuse) – encourage DIY alternatives and avoiding purchases of new hazardous products.

Action 2 – Encourage safe disposal of sharps and unwanted pharmaceuticals by promoting the safest, most cost-effective, and most convenient collection systems. This action may be accomplished by working with other state agencies and stakeholders (e.g., Regional Planning Commissions, police departments, healthcare facilities).

**INCENTIVES**

Action 2 – Explore potential funding options for municipalities and organizations that assist with preventing the use of toxic products through direct outreach and education. Mitigating the use of toxic household products may reduce the likelihood of illegal dumping where the costs then fall to the municipality.

Action 2 – Identify funding options to support regional HHW collections and the establishment of more permanent HHW drop-off facilities.

**DATA COLLECTION AND RESEARCH**

Action 2 – Identify collection strategies for household-generated batteries, paint, antifreeze, small gas cylinders, mercury-containing devices, and e-cigarettes/vapes. Assess what is happening with the materials (e.g., One day drop-off events? Year-round collections at a facility/retail location? HHW collections? Manufacturer take-back?) and determine who is involved, how collections are funded, and gaps in collection options and service areas.

**REGULATORY UPDATES**

Action 2 – Evaluate if revisions to Env-Sw 900 are appropriate for management of specific items generated by households (e.g., batteries, paint, antifreeze, small gas cylinders, mercury-containing devices, e-cigarettes/vapes).

Action 2 – Identify regulatory barriers that pose challenges for safe disposal of sharps and unused pharmaceuticals for the public, schools, non-traditional healthcare facilities (e.g., group homes).

#### LEGISLATION

Action 2 – Explore legislation for Extended Producer Responsibility (EPR), Product Stewardship, and phase-in waste disposal bans for rechargeable batteries and electronic devices with a cord (*HB617 Report Recommendation #8*).

Action 2 – Consider changes to RSA 149-M:32-40, The Toxics in Packaging Law, to expand the list of substances that are “of particular concern” such as PFAS.

### ***GOAL 3: Maximize the diversion of residential, commercial, and industrial solid waste from disposal***

When waste is generated, it should be diverted from disposal by recycling or composting whenever possible. Diversion involves “downstream” approaches that avoid disposal in landfills and incinerators.

#### PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE

Action 3 – Promote organics composting (food scraps, leaf/yard waste, clean wood) through public workshops, demonstrations, and guidance documents to ensure stakeholders understand the state’s composting regulations and opportunities for diversion collaborations.

Action 3 – Public outreach and education about NH’s current waste disposal bans.

Action 3 – Develop BMPs for municipal contract negotiations with case study examples of effective strategies that support informed, discretionary decision making based on recycling markets and projected revenue (e.g., including contract clauses that allow a municipality to adjust on-site management of certain recyclables to reduce or avoid disposal costs) (*HB 617 Report – Findings Item #34*)

Action – Provide technical assistance to citizens, businesses, and municipalities to support current recycling systems and increase local awareness about what is recyclable (RSA 149-M:6 VII-a.)

Action 3 – Assist schools with food scrap composting.

Action 3 – Promote variable rate pricing/PAYT and bag checks as a method for increasing participation in recycling programs.

Action 3 – Integrate waste reduction and diversion topics into NHDES Solid Waste Operator Training (SWOT) workshops.

#### INCENTIVES

Action 3 – Explore incentives for municipalities that utilize in-state waste regionalization strategies to increase diversion (e.g., cooperative hauling/marketing, sharing equipment, building regional infrastructure, creating solid waste districts per RSA 53-A, RSA 53-B) as well as

projects targeting diversion of specific materials/waste types (e.g., developing programs for recycling polypropylene, film plastics, diverting food waste, etc.).

Action 3 – Explore incentive/recognition programs for businesses & institutions to increase diversion of commercially generated solid waste (e.g., Maine’s Green Business/Environmental Leader Certification Program).

#### DATA COLLECTION AND RESEARCH

Action 3 – Determine reoccurring issues and challenges with contamination (i.e., unwanted items) in recycling and composting waste streams. Regulatory changes may be required.

#### REGULATORY UPDATES

Action 3 – Review the list of current Certified Waste-Derived Products (CWDP) that are certified by rule in Env-Sw 1503 and identify if any updates are warranted.

Action 3 – Review the requirements of RSA 149-M:23-25 relative to the development of district Solid Waste Plans that support the objectives of the NH SWMP.

#### LEGISLATION

Action 3 – Explore phase-in waste disposal bans for food waste, textiles, and select recyclables such as paper, cardboard, glass, metal cans, plastic (*HB617 Report Recommendation #8*).

Action 3 – Explore legislation requiring a certain percentage of C&D (by weight) to be diverted prior to disposal.

Action 3 – Explore EPR programs to encourage recycling of certain items.

### ***GOAL 4: Ensure adequate capacity for management of NH-generated waste***

All public and private stakeholders should assist in developing local and regional capacity for managing solid wastes generated in state. Management involves the development of both diversion and disposal options. Gathering comprehensive data will assist with more focused action and informed decision making.

#### PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE

Action 4 – Promote the benefits of using state waste disposal contracts for certain items, such as universal wastes, and provide guidance to municipalities for how to best use the contracts.

Action 4 – Engage with public and private industry stakeholders to explore options for developing an in-state Material Recovery Facility (MRF) to assist with transportation costs and storage shortages for recycled materials (*HB 617 Report Recommendation #16*).

Action 4 – Engage with private and public industry stakeholders to explore options for developing alternative technologies that increase solid waste management capacity consistent with preferred methods under the NH Waste Management Hierarchy.

#### INCENTIVES

Action 4 – Pursue funding opportunities that would enable a state grants program to support development of waste management infrastructure that increases statewide capacity for diversion consistent with the NH Waste Management Hierarchy (e.g., composting facilities, C&D processing facilities).

#### DATA COLLECTION AND RESEARCH

Action 4 – Pursue additional data collection methods besides annual facility reports. May be accomplished through voluntary surveys and coordinating with external partners that have solid waste data.

Action 4 – Conduct a waste characterization study to better understand New Hampshire’s waste composition and identify priorities for action.

#### REGULATORY UPDATES

Action 4 – Identify what data would be necessary from solid waste haulers and facilities operating in New Hampshire to inform solid waste management planning. Adjust annual reporting requirements, as necessary.

### ***GOAL 5: Develop local markets for waste diversion***

NHDES will collaborate with public and private stakeholders to improve regional markets for recyclables, especially lower value recyclables.

#### PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE

Action 5 – Participate in local, regional, and national discussions about materials management and share recycling market information to stakeholders when it is pertinent and can help improve recycling markets.

Action 5 – Collaborate with other state agencies to update state Request for Proposal (RFP) policies to give preference to proposals that incorporate the use of CWDP’s for certain activities or projects (e.g., compost, crushed glass). CWDP’s should be used if it is economically and logistically feasible for the specific application.

#### INCENTIVES

Action 5 – Develop incentives for New Hampshire businesses that produce products with post-consumer recycled content and compostable packaging to build demand for recycled materials.

#### DATA COLLECTION AND RESEARCH

Action 5 – Work with multi-state organizations such as the Northeast Resource Recovery Association (NRRRA), Northeast Recycling Council (NERC), Northeast Waste Management Officials Association (NEWMOA), University System of New Hampshire, and the Department of Business

& Economic Affairs (DBEA) to research business opportunities with entrepreneurs to develop regional market strategies that support diversion. *(HB 617 Report – Findings Item #31)*

Action 5 – Develop a stakeholder Recycling Market Development Committee to assist with diversion of specific materials such as “difficult” wastes like C&D debris and bulky waste (furniture, mattresses, pallets, marina waste, carpeting). Explore new and existing markets for all types of used plastic, including flexible packaging (plastic film bags, shrink wrap). *(HB 617 Report – Findings – Item #24)*

#### REGULATORY UPDATES

Action 5 – Evaluate barriers to the use of crushed glass in construction projects and review approved uses of Certified Waste-Derived Product #11, crushed glass (Processed Glass Aggregate – PGA). Consider regulatory updates to codify acceptable uses in low risk, low impact non-public works applications, including underlayment for parking lots, walkways, sidewalks, backfill for pipes, culverts.

#### LEGISLATION

Action 5 – Consider legislation requiring updates to state procurement policies to reduce solid waste and increase demand for recycled content. Policies should require product purchases with high post-consumer recycled content to drive market development. *(HB 617 Report Recommendation #13)*

### ***GOAL 6: Encourage Solid Waste Infrastructure and Practices that support state and federal Climate Change initiatives***

All stakeholders involved in solid waste management should consider climate change in planning and decision-making, emphasizing strategies that mitigate climate impacts and/or strategies that facilitate adaptation.

#### PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE

Action 6 – Collaborate with New Hampshire Department of Transportation and other stakeholders to evaluate and make updates to the State’s disaster debris management plan. Consider whether regulatory updates are needed.

Action 6 – Develop guidance for installation of solar photovoltaic panels on closed, inactive landfills. Consider whether adjustments to solid waste permitting requirements may help to simplify the process and encourage such installations.

### ***GOAL 7: Ensure that Solid Waste Policies and Regulations Support State and Federal Environmental Justice Initiatives***

The US EPA’s principles of Environmental Justice (EJ) promote fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EJ

typically centers on communities that have historically been marginalized and/or adversely impacted by application of environmental laws, regulations, and policies.

#### PUBLIC OUTREACH, EDUCATION, AND TECHNICAL ASSISTANCE

Action 7 – Develop guidance and training for Solid Waste Operators working with Limited English Proficiency (LEP) individuals.

#### REGULATORY UPDATES

Action 7 – Evaluate NHDES’ existing rules requiring applicants to notify abutters as part of the facility permit application process. Incorporate clarifications that permit applicants must notify abutting tenants (not just the property owners).

**CONCLUSION** – Success requires collaborative stakeholder involvement from all corners of the Solid Waste Management industry. NHDES will administer the SWMP and oversee its progress. NHDES will assess barriers/lessons learned as the plan is implemented and adjust actions accordingly. Biennial reports will provide a check in for meeting the state’s goal.

Overlapping actions to properly administer, implement, and track the progress of NH’s SWMP:

- Data collection/reporting – uniform, comprehensive data for NHDES to track progress
- Explore initiatives by other jurisdictions (state and local) – Successes? Lessons learned?
- *NHDES is responsible for consulting, contracting, and cooperating* with public and private organizations working towards mutual objectives (RSA 149-M:6, X)
- Public outreach & education – developing guidance documents, hosting public roundtable discussions/workshops, offering training opportunities, reporting on solutions, sharing case studies

#### APPENDICES

- A) Glossary of Terms – not legal definitions – will facilitate public understanding and readability (i.e. – diversion, waste reduction, disposal) – when applicable, include statute reference
- B) Regulation excerpts – any regulatory references that need to be written out
- C) Guidance on determining public benefit (RSA 149-M:11) for solid waste facilities
- D) Waste profile by type – brief overview of waste type, waste handling methods (C/S/T), current markets, recycling strategies, rules/policy, future needs
- E) MSW Management Costs – Create a snapshot of information that describes processes/costs related to MSW collection, transportation (\$/ton/mile for sample # of facilities), disposal (\$ tipping fee/ton), recycling (market price per commodity), composting. **Source data from NRRRA?**

**RESOURCES USED TO DEVELOP DRAFT SWMP OUTLINE**

[HB 413 Solid Waste Working Group](#) – Subcommittee Meeting Notes

[HB 617 Report](#) of the Committee to Study Recycling Streams and Solid Waste Management in New Hampshire – 2019

[Maine Materials Management Plan – 2014](#) State Waste Management and Recycling Plan Update & 2012 Waste Generation and Disposal Capacity Report

[Maine Materials Management Plan – 2019](#) State Solid Waste Management and Recycling Plan Update

[Massachusetts 2030 Solid Waste Master Plan](#): Working Together Toward Zero Waste

[Massachusetts Department of Environmental Protection Reduce & Reuse Action Plan – 2021](#)

[New Hampshire Solid Waste Master Plan – 2003](#)

[Vermont Materials Management Plan – 2019](#)

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