



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

Ordinance 19329

Proposed No. 2021-0225.2

Sponsors Kohl-Welles

1 AN ORDINANCE relating to solid waste fees charged at
 2 recycling and transfer facilities and at the Cedar Hills
 3 regional landfill; and amending Ordinance 8891, Section 3,
 4 as amended, and K.C.C.10.04.020, Ordinance 12564,
 5 Section 2, as amended, and K.C.C.10.12.021 and
 6 Ordinance 18784, Section 4, and K.C.C.10.12.058.

7 **STATEMENT OF FACTS:**

- 8 1. The solid waste division of the department of natural resources and
 9 parks provides essential public services that protect human health, the
 10 environment, and the quality of life in our region.
- 11 2. The solid waste division operates the Cedar Hills regional landfill,
 12 eight transfer stations, and two drop boxes. It also provides innovative
 13 programs to help customers prevent and recycle waste.
- 14 3. The department of natural resources and parks is proposing to increase
 15 the basic fee for disposal of municipal solid waste from \$140.82 to
 16 \$154.02 per ton, effective January 1, 2022.
- 17 4. The impact on the average single-family household with garbage
 18 collection would be approximately seventy-one cents per month in 2022.
- 19 5. A fee increase for 2022 enables the solid waste division to maintain
 20 essential solid waste disposal and recycling services and generate the

Ordinance 19329

21 revenue needed to carry out programmatic responsibilities required under
22 adopted policies.

23 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

24 SECTION 1. A. This ordinance changes fees charged for solid waste disposal at
25 transfer facilities and at the Cedar Hills regional landfill.

26 B. The fees are established and assessed under RCW 36.58.040, RCW
27 70A.200.070 and K.C.C. 10.12.021.

28 C. Explanation of the proposed fee increase is included in Attachment A to this
29 ordinance, Executive Proposed Solid Waste Disposal Fees for 2022.

30 SECTION 2. Ordinance 8891, Section 3, as amended, and K.C.C.10.04.020 are
31 hereby amended as follows:

32 A. "Adjunct transfer station" means a privately owned and operated transfer
33 facility authorized by the county to receive, consolidate and deposit municipal solid
34 waste into larger transfer vehicles for transport to and disposal at county-authorized solid
35 waste facilities.

36 B. "Asbestos- containing waste material" means any waste that contains or is
37 contaminated with asbestos-containing material. "Asbestos-containing waste material"
38 includes asbestos waste from control equipment, materials used to enclose the work area
39 during an asbestos project, asbestos-containing material collected for disposal, asbestos-
40 contaminated waste, waste, containers, bags, protective clothing or HEPA filters.

41 Asbestos-containing waste material does not include samples of asbestos-containing
42 material taken for testing or enforcement purposes.

Ordinance 19329

43 C. "Ashes" means the residue including any air pollution control equipment flue
44 dusts from combustion or incineration of material including solid wastes.

45 D. "Biomedical waste" means and is limited to the following types of waste
46 defined as "biomedical waste" in RCW 70.95K.010, as now or as hereafter amended:
47 animal waste, biosafety level 4 disease waste, cultures and stocks, human blood and
48 blood products, pathological waste, sharps waste and any other waste determined to be
49 infectious by the generator's infection control staff or committee.

50 E. "C&D" means construction and demolition waste.

51 F. "C&D receiving facility" means any properly licensed or permitted facility
52 that is designated by the county as the facility to which C&D waste, including residual
53 C&D waste, is required to be delivered under this Code. A C&D receiving facility may
54 be either a material recovery facility or a transfer facility, or both.

55 G. "C&D recycling facility" means any properly licensed or permitted facility at
56 which recyclable C&D waste is removed from mixed C&D waste for reuse or
57 remanufacture into a usable product.

58 H. "Certificated hauler" means any person engaged in the business of solid waste
59 handling having a certificate of convenience and necessity granted by the Washington
60 Utilities and Transportation Commission for that purpose.

61 I. "Charitable organization" means any organization that meets the following
62 criteria: must be defined by the Internal Revenue Service as a 501(c)3 charitable
63 organization; must be engaged as a primary form of business in the processing of
64 abandoned goods for resale or reuse; and must have an account with the solid waste
65 division.

Ordinance 19329

66 J. "Clean mud and dirt" means mud and dirt that meet the definition of "natural
67 background" in this title, as currently enacted and as hereafter amended.

68 K. "Clean wood" means stumps and branches over four inches in diameter and
69 construction lumber free of paint, preservatives, metals, concrete and other nonwood
70 additives or attachments.

71 L. "Clean wood collection area" means an area used by county residents,
72 businesses and institutions to deposit source-separated clean wood.

73 M. "Closure" means those actions taken by the owner or operator of a solid waste
74 facility to cease disposal operations or other solid waste handling activities, and to ensure
75 that all such facilities are closed in conformance with applicable rules at the time of the
76 closure and to prepare the site for the post-closure period.

77 N. "Commercial hauler" means any person, including, but not limited to,
78 certificated haulers, contract haulers and others collecting or transporting solid waste for
79 hire or consideration.

80 O. "Compacted waste" means any solid waste whose volume is less than in the
81 loose condition as a result of compression.

82 P. "Composted material means organic solid waste that has undergone biological
83 degradation and transformation under controlled conditions designed to promote aerobic
84 decomposition at a solid waste facility in compliance with the requirements of this title;
85 Natural decay of organic solid waste under uncontrolled conditions does not result in
86 composted material.

Ordinance 19329

87 Q. "Composting" means the biological degradation and transformation of organic
88 solid waste under controlled conditions designed to promote aerobic decomposition.

89 Natural decay of organic solid waste under uncontrolled conditions is not composting.

90 R. "Comprehensive solid waste management plan" means the King County plan
91 prepared in accordance with chapter 70.95 RCW, as enacted or hereafter amended.

92 S.1. "Construction and demolition (C&D) waste" means any nonputrescible
93 recyclable or nonrecyclable waste that results from construction, remodeling, repair or
94 demolition of buildings, roads or other structures and requires removal from the site of
95 construction or demolition. Except where otherwise expressly provided, "C&D waste"
96 means C&D waste generated in the county jurisdiction.

97 2. "C&D waste" does not include land clearing materials such as soil, rock,
98 vegetation or contaminated soil, friable asbestos-containing waste material as defined
99 under Regulation III, Article 4 of the Puget Sound Clean Air Agency, unacceptable
100 waste, garbage, sewerage, animal carcasses or any other solid waste that does not meet
101 the definition of C&D waste.

102 T. "Container" means a portable device used for the collection, storage (~~and~~) or
103 transportation, or any combination thereof, of solid waste including, but not limited to,
104 reusable containers, disposable containers and detachable containers.

105 U. "Contaminated soil" means any soil that does not meet the definition of
106 "natural background" in the soil cleanup standards of the chapter 173-340 WAC, as
107 currently enacted and as hereafter amended.

108 V. "Contract hauler" means any person engaged in the business of solid waste
109 handling having a contract with a city or town for that purpose.

Ordinance 19329

110 W. "County jurisdiction" means the geographic area for which King County
111 government has comprehensive planning authority for solid waste management either by
112 law, such as unincorporated areas, or by interlocal agreement, or both.

113 X. "County solid waste" means all solid waste generated, collected or disposed
114 within the county jurisdiction.

115 Y. "Curbside collection" means the pick-up of recyclable materials and solid
116 waste from a household. This pick-up may be at a curb, end of driveway or alleyway
117 from either a single family or multifamily dwelling.

118 Z. "Dangerous wastes" means any solid waste designated as dangerous waste by
119 the Washington state Department of Ecology under chapter 173-303 WAC, Dangerous
120 waste regulations.

121 AA. "Department" means any executive department and administrative office as
122 defined by King County ordinance or other applicable law and includes, but is not
123 limited to, all county agencies not associated with a department, such as the prosecuting
124 attorney, the assessor, the sheriff and the council.

125 BB. "Director" means the director of the department of natural resources and
126 parks or ~~((the director's))~~ designee.

127 CC. "Disposal" means the discharge, deposit, injection, dumping, leaking or
128 placing of any solid waste into or on any land or water.

129 DD. "Disposal facility" means a facility or facilities where any final treatment,
130 utilization, processing or disposal of solid waste occurs.

131 EE. "Disposal system" means the system of solid waste facilities, rules and
132 procedures established in accordance with this title.

Ordinance 19329

133 FF. "Diversion rate" means a measure of the amount of waste materials being
134 diverted for recycling compared with the total amount that would otherwise be thrown
135 away.

136 GG. "Division" means the solid waste division of the King County department of
137 natural resources and parks.

138 HH. "Division director" means the manager of the solid waste division of the
139 department of natural resources and parks of King County, or ~~((the division manager's))~~
140 designee.

141 II. "Drop box facility" means a facility used for the placement of a detachable
142 solid waste container, such as a drop box, including the area adjacent for necessary
143 entrance and exit roads, unloading and turnaround areas. A drop box facility normally
144 serves self-haulers with loose loads and receives waste from off- site. A drop box
145 facility may also include containers for separated recyclable materials.

146 JJ. "Environmentally preferable products" means products that have fewer or
147 reduced negative impacts on human health or the environment compared to competing
148 products that serve the same purpose. This comparison may consider raw materials
149 acquisition, production, manufacturing, packaging, distribution, operation, maintenance,
150 reuse and disposal of the product.

151 KK. "Facility" means all contiguous land and structures, other appurtenances~~((;))~~
152 and improvements on the land used for the management of solid waste.

153 LL. "Federal guidance" means guidelines provided by the United States
154 Environmental Protection Agency, the Offices of the Federal Environmental Executive,
155 federal executive orders or other guidelines offered by federal agencies.

Ordinance 19329

156 MM. "Fixed-rate vehicle" means an enclosed automobile having two or four
157 doors such as a hatchback or sedan (all without trailers). The definition of Fixed-rate
158 vehicles does not include minivans, vans, station wagons, sport utility vehicles, trucks or
159 pick-up trucks.

160 NN. "Franchise area" means a certificated hauler's territorial collection area,
161 which is delineated in the certificate of convenience and necessity issued by the
162 Washington Utilities and Transportation Commission.

163 OO. "Garbage" means all putrescible wastes, except the following:

- 164 1. Organics that have been source separated for the purpose of recycling,
- 165 2. Sewage; and
- 166 3. Sewage sludge.

167 PP. "Hazardous waste" includes, but is not limited to, explosives, medical wastes,
168 radioactive wastes, pesticides and chemicals that are potentially harmful to the public
169 health or the environment. Unless otherwise defined by the health department,
170 "hazardous waste" has the same meaning as defined by the Washington state Department
171 of Ecology in the Washington Administrative Code.

172 QQ. "Hazardous waste management plan" means a plan for managing moderate
173 risk wastes, under RCW 70.105.220.

174 RR. "Health department" means the Seattle-King County department of public
175 health.

176 SS. "Health officer" means the health department director or designee.

177 TT. "Host city" means a city that has a county transfer facility within its
178 incorporated boundaries.

Ordinance 19329

179 UU. "Household hazardous waste" means any waste that exhibits any of the
180 properties of dangerous wastes that is exempt from regulation under chapter 70.105
181 RCW, Hazardous waste management, solely because the waste is generated by
182 households. Household hazardous waste can also include other solid waste identified in
183 the local hazardous waste management plan.

184 VV. "Illegal dumping" means disposing of solid waste in any manner other than
185 in a receptacle specifically provided for that purpose, in any public place, public road,
186 public park or private property or in the waters of King County, except as authorized by
187 King County or at the official solid waste disposal facility provided by the county.

188 WW. "Industrial solid wastes" means solid waste generated from manufacturing
189 operations, food processing((;)) or other industrial processes.

190 XX. "Interlocal forum" means representatives of the metropolitan King County
191 council and representatives of incorporated cities and towns within King County
192 designated by the Suburban Cities Associated and by interlocal agreement to discuss
193 solid waste issues and facilitate regional cooperation in solid waste management. The
194 regional policy committee of the council is designated by interlocal agreements between
195 suburban cities and the county as the solid waste interlocal forum.

196 YY. "Intermediate solid waste handling facility" means any intermediate use or
197 processing site engaged in solid waste handling that is not the final site of disposal. This
198 includes material recover facilities, transfer stations, drop boxes, baling and compaction
199 sites.

200 ZZ. "Intermodal facility" means any facility operated for the purpose of
201 transporting closed containers of waste from one mode of transportation to another and

Ordinance 19329

202 the containers are not opened for further treatment, processing or consolidation of the
203 waste.

204 AAA. "King County solid waste advisory committee" means the committee
205 formed in accordance with K.C.C. chapter 10.28 and chapter 70.95 RCW to advise the
206 county on solid waste management planning, assist in the development of programs and
207 policies concerning solid waste management and review and comment on the
208 comprehensive solid waste management plan and other proposed solid waste
209 management rules, policies or ordinances before adoption.

210 BBB. "Landfill" means a disposal facility or part of a facility at which solid
211 waste is permanently placed in or on land including facilities that use solid waste as a
212 component of fill.

213 CCC. "Landfill gas" means gas produced by the microbial decomposition of
214 municipal solid waste in a landfill.

215 DDD. "Level of service" means the level and degree of service provided at
216 facilities, including hours of operation, classes of customers served and recyclable
217 materials collection available.

218 EEE. "Liquid waste" means any solid waste that is deemed to contain free liquids
219 as determined by the Paint Filter Liquids Test, Method 9095, in "Test Methods for
220 Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846.31.

221 FFF. "Littering" means to accumulate, or to place, throw, deposit, put into or in
222 any land or water or otherwise dispose of, solid waste including rubbish, ashes, garbage,
223 dead animals, industrial solid waste and all other waste material of every kind and
224 description in any manner except as authorized by this chapter.

Ordinance 19329

225 GGG. "Material recovery facility" or "MRF" means any facility that processes
226 for transport mixed C&D waste or source separated solid waste for the purpose of
227 recycling.

228 HHH. "Mattress" means any material or combination of materials that is enclosed
229 by ticking, used along or in combination with other products, and that is intended for or
230 promoted for sleeping upon, including futons and crib or child mattresses. "Mattress"
231 also refers to the foundation, which means a ticking-covered structure used to support a
232 mattress or sleep surface. The structure may include constructed wood or other frames,
233 steel springs or other materials, used alone or in combination. "Mattress" does not
234 include any unattached mattress pad or unattached mattress topper or products containing
235 liquid-and gaseous-filled ticking, including a waterbed or air mattress that does not
236 contain upholstery material between the ticking and the mattress core. For per-unit fee
237 purposes, a foundation will be charged as a separate unit.

238 III. "Mixed C&D waste" means C&D waste containing both recyclable and
239 nonrecyclable C&D waste material that has not been separated.

240 ~~((HH-))~~ JJJ. "Mixed waste processing" means sorting of solid waste after
241 collection from the point of generation to remove recyclable materials from the solid
242 waste to be disposed.

243 ~~((JJ-))~~ KKK. "Moderate risk waste" means solid waste that is limited to
244 conditionally exempt small quantity generator (CESQG) waste and household hazardous
245 waste (HHW) as defined in chapter 173-350 WAC.

246 ~~((KK-))~~ LLL. "Municipal solid waste" or "MSW" means a subset of solid waste
247 that includes unsegregated garbage, rubbish and similar solid waste material discarded

Ordinance 19329

248 from residential, commercial, institutional and industrial sources and community
249 activities, including residue after recyclable materials have been separated. Solid waste
250 that has been segregated by source and characteristic may qualify for management as a
251 non-MSW solid waste, at a facility designed and operated to address the waste's
252 characteristics and potential environmental impacts. "MSW" does not include:

- 253 1. Dangerous wastes other than wastes excluded from the requirements of
254 chapter 173-303 WAC in WAC 173-303-071, such as household hazardous wastes;
- 255 2. Any solid waste, including contaminated soil and debris, resulting from
256 response action taken under section 104 or 106 of the Comprehensive Environmental
257 Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D
258 RCW, chapter 173-340 WAC or a remedial action taken under those rules; or
- 259 3. Mixed or segregated recyclable material that has been source-separated from
260 garbage, rubbish and similar solid waste. The residual from source separated recyclable
261 materials is MSW.

262 ~~((LLL.))~~ MMM. "Natural background" means the concentration of a hazardous
263 substance consistently present in the environment that has not been influenced by
264 localized human activities.

265 ~~((MMM.))~~ NNN. "Noncommercial user" means any person who uses King
266 County solid waste facilities but is not engaged in the business of solid waste handling.

267 ~~((NNN.))~~ OOO. "Nonrecyclable C&D waste" means any C&D waste that is not
268 recyclable C&D waste. C&D waste used as alternative daily cover for landfills or as a
269 waste stabilizer is considered nonrecyclable C&D waste.

Ordinance 19329

270 (~~OOO~~) PPP. "Oil" means engine lubricating, gear, hydraulic, fuel and other
271 types of oil.

272 (~~PPP~~) QQQ. "Operating hours" means those times during which solid waste
273 facilities are normally open and available for the delivery of solid waste.

274 (~~QQQ~~) RRR. "Organics" means yard waste, food waste and soiled paper
275 products determined by the division director to be acceptable for composting.

276 (~~RRR~~) SSS. "Person" means any individual, association, business, firm,
277 corporation, limited liability corporation, copartnership, marital community, political
278 subdivision, municipality, government agency, industry, public or private corporation or
279 any other entity whatever.

280 (~~SSS~~) TTT. "Per-ton-rate vehicle" means any vehicle that is not a fixed-rate
281 vehicle. "Per-ton-rate vehicles" include, but are not limited to, minivans, vans, station
282 wagons, sport utility vehicles, vehicles with trailers, trucks, pick-up trucks, motorhomes,
283 buses and commercial vehicles.

284 (~~TTT~~) UUU. "Post-closure" means the requirements placed upon disposal
285 facilities after closure to ensure their environmental safety for at least a thirty-year period
286 or until the site becomes stabilized, which means there is little or no settlement, gas
287 production or leachate generation.

288 (~~UUU~~) VVV. "Postconsumer material" means material has been previously
289 used by consumers that is diverted from the solid waste stream.

290 (~~VVV~~) WWW. "Practicable" means satisfactory in performance and available
291 at a fair and reasonable price.

Ordinance 19329

292 (~~WWW-~~) XXX. "Primary recyclable materials" means recyclable materials that
293 are commonly collected and are included under the minimum service levels for recycling
294 collection programs. These include paper, cardboard, glass, tin and aluminum beverage
295 containers, high density polyethylene (HDPE) and polyethylene terephthalate (PET)
296 bottles and yard waste less than four inches in diameter, four feet long, or both.

297 (~~XXX-~~) YYY. "Product stewardship" means taking measures to minimize the
298 impacts of a product on the environment during its life cycle. The principle of product
299 stewardship applies to designers, suppliers, manufacturers, distributors, retailers,
300 consumers, recyclers and disposers.

301 (~~YYY-~~) ZZZ. "Putrescible waste" means solid waste that contains material
302 capable of being readily decomposed by microorganisms and which is likely to produce
303 offensive odors.

304 (~~ZZZ-~~) AAAA. "Reclamation site" means a location used for the processing or
305 the storage of recycled waste.

306 (~~AAAA-~~) BBBB. "Recovered material" means waste material that has been
307 recovered from the solid waste stream, but does not include material generated from and
308 commonly reused on site in an original manufacturing process.

309 (~~BBBB-~~) CCCC. "Recyclable C&D waste" means C&D waste material that can
310 be kept out of or recovered from C&D waste and reused or transformed into a usable
311 product. Recyclable C&D waste may consist of a single type of recyclable material or a
312 mixture of two or more types of recyclable material. Material used to produce hog fuel is
313 recyclable C&D waste.

Ordinance 19329

314 (~~CCCC~~) DDDD. "Recyclable materials" means those solid wastes that are
315 separated for reuse, recycling or composting, including, but not limited to, papers,
316 cardboard, metals, glass, plastic bottles and containers, plastic bags, mattresses, yard
317 waste, food waste, wood waste, chemicals, oil, textiles, white goods and other materials
318 that are identified as recyclable material under the King County comprehensive solid
319 waste management plan.

320 (~~DDDD~~) EEEE. "Recycled paper" means paper meeting recycled content
321 standards in federal guidance.

322 (~~EEEE~~) FFFF. "Recycled product" means a product manufactured with the
323 maximum practicable amount of recovered material, especially postconsumer material.

324 (~~FFFF~~) GGGG. "Recycling" means transforming or remanufacturing waste
325 materials into usable or marketable materials for use other than landfill disposal or
326 incineration. "Recycling" does not include collection, compacting, repackaging (~~(,~~
327 ~~and/~~)or sorting, or any combination thereof, for the purpose of transport. "Recycling"
328 does not include combustion of solid waste or preparation of a fuel from solid waste.

329 (~~GGGG~~) HHHH. "Region" means the area encompassing those cities with
330 solid waste signed interlocal agreements and unincorporated areas of King County that
331 are included in the comprehensive solid waste management plan. "Region" includes all
332 of King County except the cities of Seattle and Milton.

333 (~~HHHH~~) IIII. "Regional direct" means any solid waste generated and collected
334 in King County and transported to Cedar Hills regional landfill by conventional long haul
335 transfer vehicles from privately owned solid waste transfer stations or intermediate

Ordinance 19329

336 handling facilities permitted by the health department as provided for in King County
337 board of health regulations.

338 ~~((HHH))~~ JJJJ. "Regulated refrigerant" means a class I or class II substance as listed
339 in Title VI of the Federal Clean Air Act Amendments of 1990.

340 ~~((JJJ))~~ KKKK. "Residual C&D waste" means the nonrecyclable waste
341 remaining after recycling processes have removed recyclable waste.

342 ~~((KKK))~~ LLLL. "Reuse" means the return of a commodity into the economic
343 stream for use.

344 ~~((LLL))~~ MMMM. "Rubbish" means all nonputrescible wastes, except materials
345 that have been source separated for the purpose of recycling.

346 ~~((MMM))~~ NNNN. "Rural transfer facilities" means the Vashon and Enumclaw
347 transfer stations, the Cedar Falls and Skykomish drop box facilities and other facilities
348 the division director designates as rural transfer facilities.

349 ~~((NNN))~~ OOOO. "Salvaging" or "scavenging" means the removal of materials
350 from a solid waste facility without the authorization of the division director and the health
351 officer.

352 ~~((OOO))~~ PPPP. "Secondary recyclable materials" means those recyclable
353 materials that have not been designated as being included in the county's minimum
354 service levels for recyclable materials collection. "Secondary recyclable" are those with
355 generally limited markets, a lack of collection systems or a limited number of generators
356 of the material.

357 ~~((PPP))~~ QQQQ. "Secured load" means a load of solid waste that has been
358 securely fastened, covered, or both in a manner that will prevent the covering or any part

Ordinance 19329

359 of the load from becoming loose, detached or leaving the vehicle while the vehicle is
360 moving except sand may be dropped for the purpose of securing traction.

361 ~~((QQQQ-))~~ RRRR. "Self-hauler" means county residents, business and
362 institutions who choose to bring their municipal solid waste and recyclable materials to
363 the transfer facilities themselves.

364 ~~((RRRR-))~~ SSSS. "Shall" and "will" in a policy mean that it is mandatory to carry
365 out the policy. "Should" in a policy provides noncompulsory guidance and establishes
366 some discretion in making decisions. "May" in a policy means that it is in the interest of
367 the county or other named entity to carry out the policy but there is a total discretion in
368 making decisions.

369 ~~((SSSS-))~~ TTTT. "Solid waste" or "wastes" means all putrescible and
370 nonputrescible solid and semisolid wastes, except wastes identified in WAC 173-350-
371 020, including, but not limited to, garbage, rubbish, ashes, industrial wastes, commercial
372 waste, sewage sludge, demolition and construction wastes, abandoned vehicles or parts
373 thereof, contaminated soils and contaminated dredged material, discarded commodities
374 and recyclable materials.

375 ~~((TTTT-))~~ UUUU. "Solid waste collection entity" means every person owning,
376 controlling, operating or managing vehicles used in the business of transporting solid
377 waste for collection or disposal, or both, for compensation including all certificated
378 haulers, any city using its own employees or any person operating under a contract with
379 or franchise from a city or town performing solid waste collection services within the
380 jurisdiction.

Ordinance 19329

381 (~~UUUU~~) VVVV. "Solid waste facility" means a disposal facility or
382 intermediate solid waste handling facility. "Solid waste facility" includes, but is not
383 limited to, transfer stations, intermodal facilities, landfills, incinerators, composting
384 plants and facilities for the recycling or recovery of resources from solid waste or the
385 conversion of the energy from solid waste to more useful forms or combinations thereof.
386 "Solid waste facility" includes all contiguous land, including buffers and setbacks, and
387 structures, other appurtenances and improvements on the land used for solid waste
388 handling.

389 (~~VVVV~~) WWWW. "Solid waste interlocal agreement" means an agreement
390 between a city and the county for use of the King County solid waste system for disposal
391 of solid waste generated or collected within the city.

392 (~~WWWW~~) XXXX. "Solid waste management" means the systematic
393 administration of activities that provide for the reduction in generated volume, source
394 separation, collection, storage, transportation, transfer, recycling, processing, treatment
395 and disposal of solid waste. "Solid waste management" includes public education and
396 marketing activities.

397 (~~XXXX~~) YYYY. "Solid waste system" means King County's system of solid
398 waste facilities as authorized under RCW 36.58.040 as here enacted or otherwise
399 amended and as established in accordance with the approved King County
400 comprehensive solid waste management plan.

401 (~~YYYY~~) ZZZZ. "Source separation" means the separation of recyclable
402 materials from other solid waste at the place where the waste originates.

Ordinance 19329

403 (~~ZZZZZ~~) AAAAA. "Special waste" means all nonhazardous wastes that have
404 special handling needs or have specific waste properties that require waste clearance by
405 either the division or the health department, or both. These wastes are specified in the
406 waste acceptance rule (P.U.T. 7-1-5 (PR) or future amendments of that rule), and include
407 contaminated soil, asbestos-containing materials, wastewater treatment plant grit,
408 industrial wastes and other wastes.

409 (~~AAAAA~~) BBBBB. "Suspect waste" means any waste the division director
410 suspects may be unauthorized waste.

411 (~~BBBBB~~) CCCCC. "Sustainable building principles" means the use of energy-
412 and resource-efficient site and building design, construction, operations and management.

413 (~~CCCCC~~) DDDDD. "Transfer facility" means a permanent fixed, supplemental
414 collection and transportation facility used by either persons or route collection vehicles,
415 or both, to deposit collected solid waste from off- site into a larger transfer vehicle for
416 transport to a solid waste handling facility. "Transfer facility" may also include recycling
417 operations.

418 (~~DDDDD~~) EEEE. "Unacceptable waste" means any material for which the
419 transportation or disposal would constitute a violation of any governmental requirement
420 pertaining to health, safety or the environment. The material may include, but is not
421 limited to, hazardous, extremely hazardous or dangerous waste as designated under
422 Washington state or federal law, including, but not limited to, regulations contained in the
423 Washington Administrative Code, now in effect or as may be hereafter amended, or in
424 the Code of Federal regulations, now in effect or as may be hereafter amended.

Ordinance 19329

425 (~~EEEE-~~) FFFFF. "Unauthorized waste" means waste that is not acceptable for
426 disposal at any or a specific solid waste facility according to applicable rules or a
427 determination of the division director.

428 (~~FFFFF-~~) GGGGG. "Uncompacted waste" means any solid waste in an
429 uncompressed or loose condition.

430 (~~GGGGG-~~) HHHHH. "Unincorporated service area" means the geographical
431 area of unincorporated King County designated to receive the solid waste, recyclable
432 material and organics collection services defined in this chapter. The unincorporated
433 service area does not include:

- 434 1. Vashon Island (served under Certificate No. G-87, Tariff No. 7);
435 2. Snoqualmie pass (served under Certificate No. G-237, Tariff No. 10); and
436 3. Areas where residential garbage collection service is not provided by a
437 certificated hauler.

438 (~~HHHHH-~~) IIIII. "Unsecured load" means a load of solid waste that has not
439 been securely fastened, covered, or both to prevent the covering or any part of the load
440 from becoming loose, detached or leaving the vehicle while the vehicle is moving.

441 (~~HHH-~~) JJJJJ. "Urban transfer facilities" means the county's Algona, Bow Lake,
442 Factoria, Houghton, Shoreline, and Renton transfer facilities and other transfer facilities
443 the division director designates as urban transfer facilities.

444 (~~JJJJ-~~) KKKKK. "Washington Utilities and Transportation Commission"
445 means the state commission created under chapter 80.01 RCW, as now enacted or
446 hereafter amended.

Ordinance 19329

447 (~~(KKKKK-)~~) LLLLL. "Waste export" means the act of sending waste to a
448 disposal facility out of the region.

449 (~~(LLLLL-)~~) MMMMM. "Waste reduction" means reducing the amount or type
450 of waste generated.

451 (~~(MMMMM-)~~) NNNNN. "Waste stream" means the total flow of solid waste
452 from homes, businesses, institutions and manufacturing plants that must be recycled or
453 disposed in landfills, or any segment thereof, such as the "residential waste stream" or the
454 "recyclable waste stream."

455 (~~(NNNNN-)~~) OOOOO. "White goods" means major appliances, including
456 refrigerators, freezers, heat pumps, air conditioners, stoves, ranges, dishwashers, washers,
457 dryers, trash compactors, dehumidifiers and other appliances specified by the division
458 director.

459 (~~(OOOOO-)~~) PPPPP. "White goods collection area" means an area used by
460 county residents to deposit source separated white goods.

461 (~~(PPPPP-)~~) QQQQQ. "Wood waste" means solid waste consisting of wood pieces
462 or particles generated as a byproduct resulting from the handling and processing of wood,
463 including, but not limited to, hog fuel, sawdust, shavings, chips, bark, small pieces of
464 wood, stumps, limbs and any other material composed largely of wood that has no
465 significant commercial value, but does not include slash developed from logging
466 operations unless disposed of on a different site, and does not include wood pieces or
467 particles containing chemical preservatives such as creosote, pentachlorophenol or
468 copper-chrome-arsenate.

Ordinance 19329

469 (~~QQQQQ~~) RRRRR. "Woody debris" means natural vegetation greater than
470 four inches in diameter, four feet in length, or both, such as stumps, fallen tree branches
471 or limbs, resulting from land clearing activity, storms or natural disasters.

472 (~~RRRRR~~) SSSSS. "Yard waste" means a compostable organic material
473 generated in yards or gardens, including but not limited to, leaves, grass, branches,
474 prunings and clippings of woody and fleshy plants and unflocked holiday trees, but does
475 not include rocks, dirt or sod, concrete, asphalt, bricks, land-clearing wastes, demolition
476 wastes, wood waste or food waste.

477 (~~SSSSS~~) TTTTT. "Yard waste collection area" means an area used by county
478 residents, businesses and institutions to deposit source-separated yard waste.

479 (~~TTTTT~~) UUUUU. "Zero waste of resources" is a planning principle and
480 framework designated to eliminate the disposal of materials with economic value through
481 reuse, recycling, or both.

482 SECTION 3. Ordinance 12564, Section 2, as amended, and K.C.C.10.12.021 are
483 hereby amended as follows:

484 Except as otherwise provided in (~~section 4 of this ordinance~~) K.C.C. 10.12.058,
485 all persons using county-operated solid waste transfer stations and drop boxes shall pay
486 the service fees in the following schedules:

487 A. Fees for the use of solid waste facilities with scales, excluding Cedar Hills,
488 shall be:

489 1. Solid waste disposal:

- | | |
|--------------------------------------|-------------------------------------------------|
| 490 Fixed-rate vehicles | (\$22.53) <u>\$24.64</u> per entry |
| 491 Per-ton-rate vehicles | (\$140.82) <u>\$154.02</u> per ton |

Ordinance 19329

492	Charitable organizations	(\$108.43) <u>\$118.60</u> per ton
493	Minimum	(\$22.53) <u>\$24.64</u> per vehicle
494	Charitable organizations, minimum charge	(\$17.35) <u>\$18.89</u> per entry;
495	2. Deposit of source-separated yard waste, clean wood waste, or any	
496	combination thereof:	
497	Fixed-rate vehicles	(\$12.00) <u>\$16.00</u> per entry
498	Per-ton-rate vehicles	(\$75.00) <u>\$100.00</u> per ton
499	Minimum charge	(\$12.00) <u>\$16.00</u> per vehicle
500	3. Deposit of major appliances:	
501	Major appliances with refrigerants	\$30.00 per unit;
502	4. <u>Deposit of mattresses:</u>	
503	<u>Mattresses</u>	<u>\$30.00 per unit; and</u>
504	5. <u>Qualified low-income</u> (non-account) customers shall receive fee discounts	
505	of (\$12.00) <u>\$14.00</u> per entry for deposit of solid waste, yard waste, clean wood waste,	
506	(and) <u>appliances and mattresses</u> . Customers with mixed loads must separate and	
507	deposit materials with sequential visits to the scale house to receive a discount on the	
508	individual waste types.	
509	B. Fees for the use of solid waste facilities without scales shall be based upon the	
510	cubic yard or fraction thereof as follows:	
511	1. Solid waste disposal:	
512	Fixed-rate vehicles	(\$22.53) <u>\$24.64</u> per entry
513	Per-ton-rate vehicles:	
514	Compacted wastes	(\$40.84) <u>\$44.67</u> per cubic yard

Ordinance 19329

-
- 515 Uncompacted wastes ((~~\$23.94~~) \$26.18 per cubic yard
- 516 Minimum charge ((~~\$22.53~~) \$24.64 per vehicle;
- 517 2. Deposit of source-separated yard waste, clean wood waste(~~(;)~~) or any
- 518 combination thereof:
- 519 Fixed-rate vehicles ((~~\$12.00~~) \$16.00 per entry
- 520 Per-ton-rate vehicles:
- 521 Compacted wastes ((~~\$21.75~~) \$29.00 per cubic yard
- 522 Uncompacted wastes ((~~\$12.75~~) \$17.00 per cubic yard
- 523 Minimum charge ((~~\$12.00~~) \$16.00 per vehicle;
- 524 3. Qualified low-income (~~(non-account)~~) customers shall receive fee discounts
- 525 of ((~~\$12.00~~) \$14.00 per entry for deposit of solid waste, yard waste, clean wood waste
- 526 (~~(and)~~), appliances and mattresses. Customers with mixed loads must separate and
- 527 deposit materials with sequential visits to the scale house to receive a discount on the
- 528 individual waste types.
- 529 C. Fees at the Cedar Hills regional landfill shall be:
- 530 Cedar Hills Regional Direct ((~~\$120.00~~) \$131.00 per ton
- 531 Per-ton-rate vehicles ((~~\$140.82~~) \$154.02 per ton
- 532 Per-ton-mattress \$1,090.00 per ton
- 533 Disposal by other vehicles is at the discretion of the division director.
- 534 D. A moderate-risk waste surcharge shall be added to all solid waste disposed by
- 535 nonsolid waste collection entities using county operated solid waste facilities. The fee
- 536 schedule is as follows:
- 537 1. For facilities with scales:
-

Ordinance 19329

538	Per-ton-rate vehicles	(((\$4.99)) <u>\$5.84</u> per ton
539	Minimum charge	(((\$1.91)) <u>\$2.23</u> per entry
540	Fixed-rate vehicles	(((\$1.91)) <u>\$2.23</u> per entry

541 2. For facilities without scales:

542	Per-ton-rate vehicles:	
543	Compacted	(((\$1.10)) <u>\$1.28</u> per cubic yard
544	Uncompacted	(((\$0.62)) <u>\$0.73</u> per cubic yard
545	Minimum charge	(((\$1.91)) <u>\$2.23</u> per entry
546	Fixed-rate vehicles	(((\$1.91)) <u>\$2.23</u> per entry.

547 E. ~~((Effective January 1, 2020, a moderate risk waste surcharge shall be added to~~
548 ~~all solid waste disposed by nonsolid waste collection entities using county operated solid~~
549 ~~waste facilities. The fee schedule is as follows:~~

550 ~~1. For facilities with scales:~~

551	Per ton rate vehicles	————— \$5.25 per ton
552	Minimum charge	————— \$2.01 per entry
553	Fixed rate vehicles	————— \$2.01 per entry

554 ~~2. For facilities without scales:~~

555	Per ton rate vehicles:	
556	Compacted	————— \$1.15 per cubic yard
557	Uncompacted	————— \$0.65 per cubic yard
558	Minimum charge	————— \$2.01 per entry
559	Fixed rate vehicles	————— \$2.01 per entry

Ordinance 19329

560 F.) As determined by the division director, a special waste fee shall be charged
 561 for special waste including asbestos-containing waste material and other wastes requiring
 562 clearances in accordance with King County Board of Health Code Title 10 or rules
 563 adopted by the department. The fee schedule is as follows:

564	Special waste fee	(\$169.00) <u>\$185.00</u> per ton
565	Special waste fee minimum charge	(\$27.04) <u>\$29.60</u> per entry
566	Special waste fee, extra handling	(\$197.00) <u>\$216.00</u> per ton
567	Special waste fee, extra handling	
568	minimum charge	(\$31.54) <u>\$34.56</u> per entry

569 ~~(G.)~~ F. In the absence of exact weights or measurements, the estimate ~~((€))~~ by
 570 the division director is binding upon the user.

571 ~~(H.)~~ G. The division director may establish fees for handling and processing of
 572 recyclable materials for which no other fee has been established by ordinance. The fees
 573 need not recover the full cost of handling and processing.

574 SECTION 4. Ordinance 18784, Section 4, and K.C.C.10.12.058 are hereby
 575 amended as follows:

576 A. The solid waste division has established a fee discount program to assist
 577 qualified low-income ~~((non-account))~~ customers with the costs of solid waste services at
 578 county transfer facilities. Discounts on fees for use of disposal sites are available to
 579 qualified low-income transfer station customers in accordance with this chapter.

580 B. The low-income discount fee program applies to qualified individuals only
 581 and is not intended for use by businesses or commercial enterprises. Qualified customers
 582 under the fee discount program must be at or below two hundred percent of the federal

Ordinance 19329

583 poverty level as defined by United States Health and Human Services Department. A
584 customer does not qualify for the fee discount program if the customer is disposing of
585 materials generated or collected in conjunction with the operation of a business or
586 commercial enterprise. Failure to comply with this subsection is a violation of this
587 chapter.

588 C. The fee discount shall be provided only when a qualified customer presents
589 proof of eligibility as issued by a county-recognized service provider authorized to

Ordinance 19329

- 590 qualify low-income individuals for federal, state or local benefits.
- 591 SECTION 5. This ordinance takes effect January 1, 2022.

Ordinance 19329 was introduced on 6/15/2021 and passed by the Metropolitan King County Council on 9/7/2021, by the following vote:

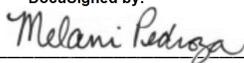
Yes: 6 - Ms. Balducci, Mr. Dembowski, Ms. Kohl-Welles, Ms. Lambert, Mr. McDermott and Mr. Zahilay
No: 3 - Mr. Dunn, Mr. Upthegrove and Mr. von Reichbauer

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

DocuSigned by:

7E1C273CE9994B6...
Claudia Balducci, Chair

ATTEST:

DocuSigned by:

8DE1BB375AD3422...
Melani Pedroza, Clerk of the Council

APPROVED this _____ day of 9/21/2021, _____.

DocuSigned by:

4FBCAB8196AE4C6...
Dow Constantine, County Executive

Attachments: A. Proposed Solid Waste Disposal Fees for 2022 - June 2021

Proposed Solid Waste Disposal Fees for 2022

June 2021



King County

I. Contents

II. Executive Summary 3

III. Background..... 4

IV. Report Requirements 9

 A. Rate Model Methodology 9

 B. Proposed Fees 9

 C. Financial Projections 10

 D. Rate Determination 18

V. Conclusion 22

VI. Appendices 23

Table of Figures

Figure 1: 20-Year Overview of the Basic Fee..... 5

Figure 2: 20-Year Overview of Tonnage..... 6

Figure 3: Comparison of Tonnage Scenarios..... 8

Figure 4: Relationship of Expenditures, Revenues, Tonnage, and Rate 9

Figure 5: Comparison of 2019-2020 Budget and 2021-2022 Rate Proposal Expenditures 11

Figure 6: Comparison of Revenue Sources, 2017-2022. 15

Figure 7: Capital Costs Drive the Rate Increase 18

II. Executive Summary

The Department of Natural Resources and Parks (DNRP) has kept its Solid Waste Basic Fee, a disposal fee charged on a per-ton basis to customers disposing of garbage in the King County system, steady since 2018 and is proposing an increase of 9.4 percent in 2022. The impact of this increase for a typical residential customer, after commercial haulers pass on these costs, is forecast to be \$0.71 per month.

This rate increase is needed to sustain current essential services, including recycling and waste disposal services at transfer stations, continued operations at the Cedar Hills Regional Landfill (CHRLF), and recycling and waste-prevention programs. A total of 37 partner cities and 1.5 million people depend on these disposal services. The proposed increase also provides for investments necessary to achieving the goals contained in the [2019 Comprehensive Solid Waste Management Plan](#) (Comp Plan) and the [2020 King County Strategic Climate Action Plan](#). This increase will allow DNRP to continue the services and programs customers have come to expect and rely on, and that have helped this region become one of the best for recycling in the nation.

While preparing the 2021-2022 rate and budget proposals, DNRP staff met with stakeholders and partners from January to June 2020 to talk about a potential rate increase. During that process, the department received clear input that no rate increase should be implemented for 2021. Stakeholders and partners cited the economic fallout caused by the COVID-19 pandemic which challenged budgets across the county, whether for households dealing with job losses and illness, businesses absorbing losses from closures and increased operational costs, or municipalities facing falling revenues.

In order to accomplish this and improve its financial position, DNRP convened an employee task force to generate ideas for reducing costs and increasing revenue. In total, the department identified \$40 million in net cost reductions and spending deferrals. As a result of this engagement and implementation of these cost saving ideas, the department was able to lower its adopted expenditures for the 2021-2022 biennium by \$7 million compared with the 2019-2020 adopted budget, despite inflationary cost increases and the addition of the Zero Waste of Resources and Climate Change programs. Consequently, DNRP was able to forego a rate increase in 2021.

The overarching goal of the fiscal planning work for this 2022 rate proposal has been to maximize value for customers while mitigating financial impacts on rate payers. This rate proposal follows many months of stakeholder and partner engagement that resumed in December of 2020. The department's advisory committees, the Metropolitan Solid Waste Management Advisory Committee (MSWMAC) and Solid Waste Advisory Committee (SWAC), expressed willingness to support a rate increase that would allow the department to maintain current service levels, fund key investments in climate and environmental programs, and fulfill the commitments made in the Comp Plan. These commitments include construction of the new South County Recycling and Transfer Station in Algona and a new Northeast Recycling and Transfer Station to replace the outdated Houghton facility.

This proposed rate increase would provide DNRP with an estimated \$500 million for critical infrastructure projects between now and 2026. It provides the necessary revenue to support the regional solid waste system and ensure continued progress on investments such as transfer station modernization, maximization of disposal capacity at the Cedar Hills Regional Landfill, diversion of resources from disposal, and expansion of recycling services. This proposed rate increase funds these

key initiatives while also positioning the division to maintain a smooth and steady rate path in future years as requested by stakeholders.

This current rate proposal also introduces new sources of revenue, including a new mattress handling fee and the sale of surplus properties. These sources of revenue reduce the need for additional increases to the Basic Fee and provide a better balance between the cost of delivering services and the fees charged by the department. Another boost in revenues will derive from increasing the yard and wood waste fees from \$75 per ton to \$100 per ton. This fee has been in place since 2013, however, the cost to deliver this service is higher than the current \$75 per ton. Increasing this fee brings the revenue it generates closer to the cost of this service. This rate proposal also includes making permanent the [Cleanup-LIFT](#) low-income discount program, providing a discount equal to half the minimum fee for self-haul customers who show an ORCA LIFT, Electronic Benefits Transfer (EBT), or Medicaid card at transfer stations.

All told, the 2021-2022 adopted budget assumed a 14 percent rate increase in 2022. However, through the cost-saving work of the employee task force, some one-time revenues, and better than expected 2020 disposal tonnage, the department has been able to reduce that 14 percent to a 9.4 percent increase in 2022.

The feedback DNRP received from stakeholders about this proposal was positive. Partner cities and haulers have voiced support for the department moving forward with these investments. Nevertheless, for the sake of due diligence, the department reviewed and updated its analysis of the cuts that would be necessary without a rate increase in 2022 and shared the information with city and hauler partners. These stakeholders did not voice support for a no rate increase option given the cuts in services and investment that would likely result from a fourth year with no rate increase. These stakeholders acknowledged the need for an adequate revenue stream to support the priorities laid out above. More details are provided in the “No Increase Option” section of this report.

Ultimately, sanitation is an essential service, and it is imperative that use of this service is equitable and accessible for all.¹ Beyond the disappointment service reductions would cause customers, additional ramifications include increased traffic to and at stations when open, the potential for more illegal dumping, and a loss of flow control as customers would seek out services in other jurisdictions. These impacts could cause the department to reduce services even further to properly mitigate them.

III. Background

Department Overview: The King County Department of Natural Resources and Parks (DNRP) works in support of sustainable and livable communities and a clean and healthy natural environment. Its mission is to foster environmental stewardship and strengthen communities by providing regional parks, protecting the region’s water, air, land, and natural habitats, and reducing, safely disposing of, and creating resources from wastewater and solid waste.

The DNRP is guided by its vision to achieve Zero Waste of Resources by 2030, and to enhance the environment through collaboration and innovation. The department operates eight transfer stations, two rural drop boxes, and the Cedar Hills Regional Landfill (CHRLF), the only operational landfill in the

¹ Sanitation means providing adequate recycling and disposal services to ensure public health.

county. DNRP stakeholders include residents and business owners in unincorporated King County and 37 cities throughout the county--all except the cities of Seattle and Milton, which are part of separate solid waste systems. The department’s solid waste mission is to deliver value to its customers and stakeholders, and to continuously improve waste prevention, resource recovery, and waste disposal. The DNRP’s Solid Waste Division (SWD) is an Enterprise Fund. DNRP proposes solid waste rate increases to support both ongoing operations and new investments in solid waste infrastructure. About 90 percent of DNRP’s revenue from the solid waste system is derived from its Basic Fee, a per-ton fee charged to dispose of waste at solid waste facilities.

Key Historical Context: Historically, DNRP has operated over long periods of time with no rate increase for solid waste disposal. When implemented, rate increases have typically ranged between 5 percent and 15 percent. During development of the 2019-2020 rate, community stakeholders and partner cities requested that DNRP take a more incremental approach that would result in a more predictable path for rate increases.

Figure 1: 20-Year Overview of the Basic Fee

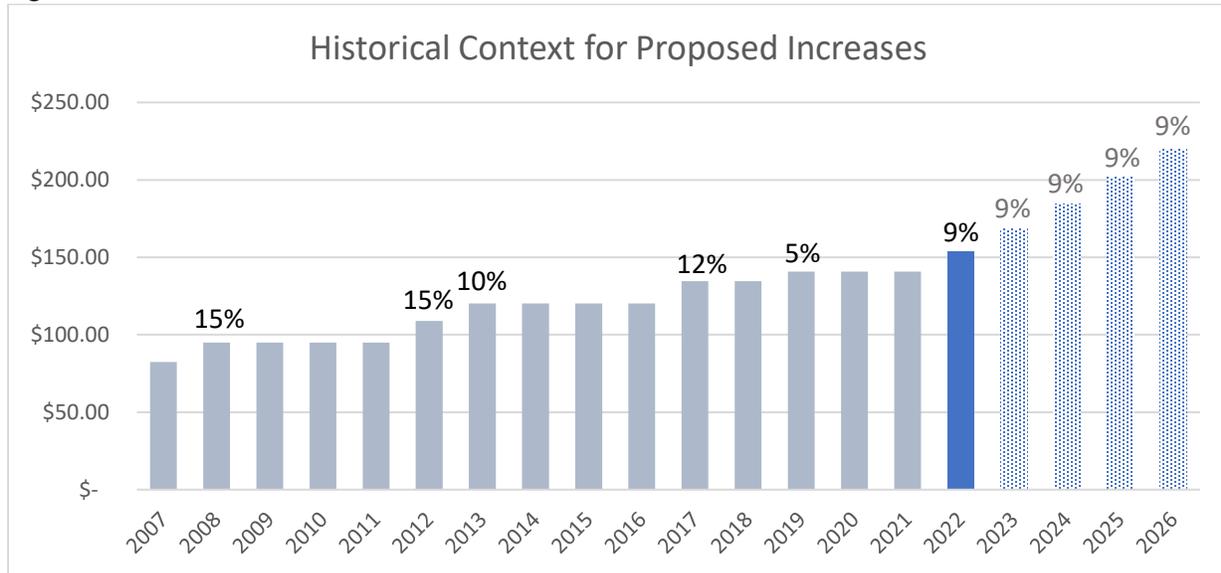
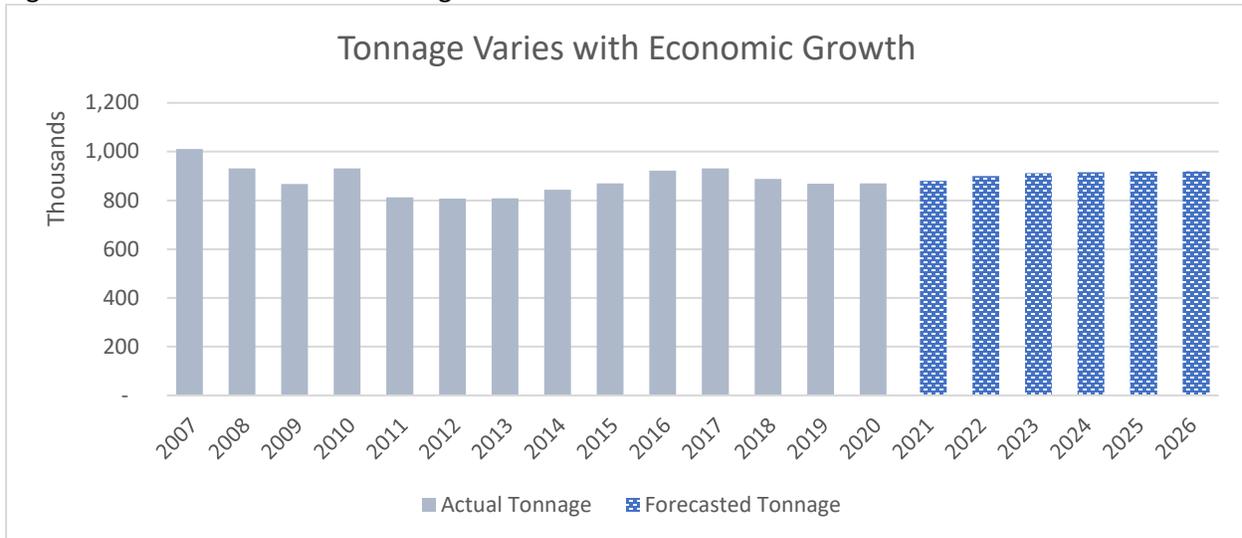


Figure 1 shows the history of rate increases since 2007, along with the proposed increase for 2022 and projections through 2026. The proposed rate increase for 2022 is low compared with most previous increases preceded by several years of flat rates. By staggering the increase in one-year increments, the rate of increase is more gradual than setting a single rate for the biennium. The projected rate increases after 2022 are expected to be higher than annual rates would normally be due to (1) continued implementation of major capital projects such as the South County Recycling and Transfer Station (SCRTS), Northeast Recycling and Transfer Station (NERTS), and Area 9 development at the CHRLF and (2) deferring some costs from 2021-2022 to future years to mitigate the increase as recovery from the pandemic begins.

A primary determinant of the Basic Fee is the amount of tonnage received in a given year. DNRP prepares a tonnage forecast each February that provides a prediction of disposal over the next 10 years. After 10 years, the tonnage forecast uses a long-term growth rate based on historical tonnage. This forecast is used in the rate model to determine the Basic Fee.

Figure 2: 20-Year Overview of Tonnage



The historic trend has been one of rising tonnage, but the year-to-year relationship is more complex. Periods of recession result in falling tonnage, as demonstrated by the years 2008 to 2012. DNRP has a goal of reducing waste, and the implementation of policies in support of that goal can also result in fewer tons being received at facilities. An example of this is the implementation of diverting construction and demolition (C&D) debris from landfilling, which resulted in an estimated 7 percent annual decline in tonnage in 2018 and 2019. Early in 2020, DNRP forecast reductions in tonnage due to the economic impacts of the COVID-19 pandemic. While the department did see a drop in commercial tonnage, this was offset by increases in regional direct tons and a small increase in self-haul waste. ²

While revenues are almost wholly dependent on tonnage, the converse is true for expenditures. It is estimated that 90 percent of DNRP's expenses are fixed, due to the operation of many facilities, the purchase and maintenance of specialized equipment, obligations from long-term debt, and the cost of meeting regulatory requirements. ³ Thus, declines in tonnage have a smaller impact on expenditures relative to the accompanying loss of revenue. Over the past three biennia, DNRP expenditures have increased at an average annual rate of 8 percent. The primary drivers of expenditure increases are related to the service levels provided at stations, the needs of capital programs, and the ongoing cost to meet environmental and safety controls at the CHRLF and closed landfill properties.

Key Current Context: During the previous rate-setting period, the tonnage forecast did not fully anticipate the effects of the C&D ban. Thus, the 2019-2020 rate proposal assumed more tonnage than was actually received. As a result, revenue was \$20 million short of what had been anticipated.

² In this case, regional direct tons refer to residual waste from material recovery facilities (MRFs) that was being taken by the City of Seattle Public Utilities (SPU). The proper disposal of these tons (collected in the King County Solid Waste service area, as part of the recycling waste stream, but sorted at MRFs in Seattle) is under discussion between DNRP and SPU.

³ "Estimated Fixed vs. Variable Costs in 2016 KSCWD Budget." From "Alternative Solid Waste Revenue Structure", FCS Group, November 2017, Exhibit 3-3.

To address this fiscal challenge, DNRP convened an employee task force to generate cost-saving and revenue-generating ideas. The task force met throughout the fourth quarter of 2019, and representatives held break-out sessions within each work group in DNRP's SWD to allow for wide participation. The task force generated close to 200 ideas, submitted by DNRP staff at all levels of the organization.

These ideas, which represented over \$70 million in savings, were evaluated for financial impact, feasibility, and alignment with the department's strategic goals. Expenditures were prioritized so that spending levels could be reduced, while maintaining progress toward fulfilling commitments made in the Comp Plan. These include achieving zero waste of resources by 2030 and construction of two new transfer stations in the next 10 years. Ultimately, many of these ideas were included in the overall cost savings and expenditure deferrals of \$40 million that allowed for avoidance of a rate increase in 2021.

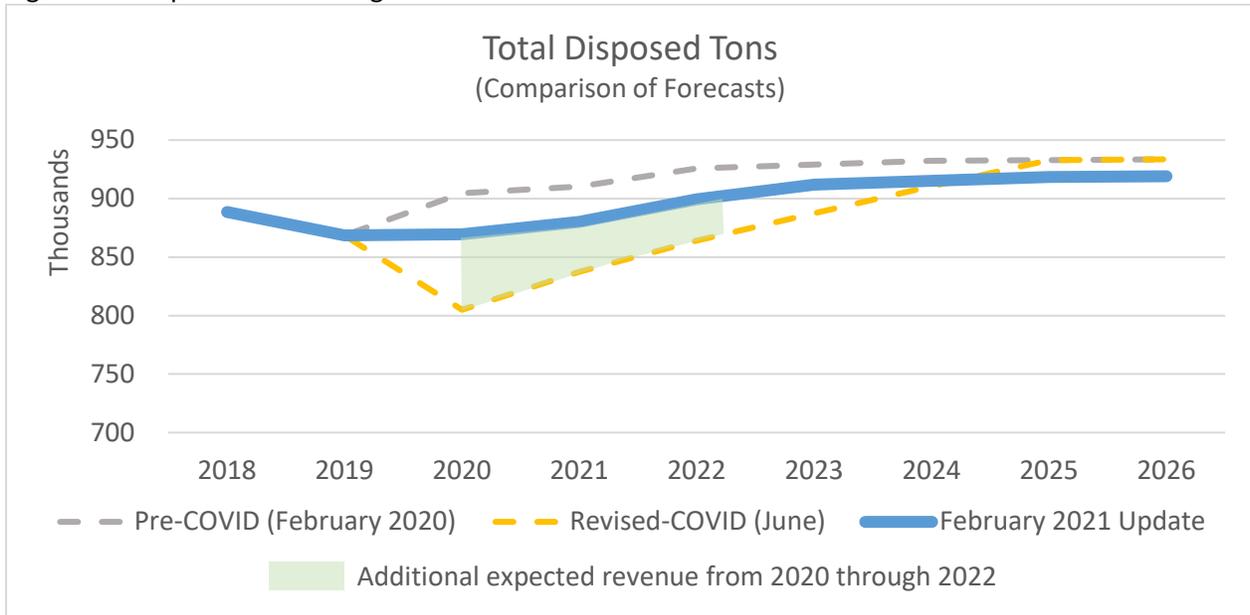
Impacts from the COVID-19 Pandemic

Tonnage is largely dependent on consumption patterns, and the tonnage forecast uses two key variables--employment and retail sales--to estimate consumption in DNRP's service area. With the emergence of COVID-19 and the implementation of the "Stay Home, Stay Healthy" order, economic conditions in the region changed rapidly, making it apparent that the tonnage forecast would need to be updated.

Given the fluidity of the situation, DNRP developed three scenarios, assuming low, medium, and high impacts to the key variables, in order to model the potential effects of the pandemic. In June 2020, DNRP used the Medium-Impact Scenario in the rate model since the key variables seemed most likely to trend in that direction. The department used this forecast to develop the 2021-2022 Proposed Budget.

In the meantime, DNRP continued to closely monitor tonnage, and in February 2021 saw improved numbers. In Figure 3, the green shaded area represents the additional expected revenue from 2020 through 2022, based on 2020 actuals and an updated forecast, that was not assumed in the department's 2021-2022 budget proposal.

Figure 3: Comparison of Tonnage Scenarios



Summary

Heading into the 2021-2022 biennium, DNRP is facing revenue shortfalls created by the successful implementation of the C&D diversion and the COVID-19 pandemic coupled with the growing capital costs of new construction. The financial impact of the revenue shortfall is exacerbated by an imbalance in the department's business model: while revenue is highly variable, expenditures, such as the operation of DNRP facilities, purchase and maintenance of specialized equipment, debt obligations, and responsibility to meet regulatory requirements, are largely fixed. Declines in revenue thus have a magnified effect on the department's financial health, as expenditures will largely stay the same even as revenues fall.

As DNRP focuses on developing and implementing a plan to reach zero waste of resources by 2030, more tonnage will be diverted from the waste stream along with the revenue it would have generated. This will be an important first step in contributing to development of a circular economy and will have long-term financial and environmental benefits for residents of the region.⁴ However, without a change to the rate model, it will also create fiscal challenges for the department.

To address the issue, DNRP is working with regional leaders in a work group that is studying, and will make recommendations regarding, a rate restructure for the future. DNRP is not restructuring the rate for 2021-2022 because this represents a fundamental shift in revenue collection, and time is needed to work with cities and haulers to agree on an approach. This work group is exploring ways to reshape the system so that funding is not so dependent on tonnage; and will formulate a proposal to restructure the rate prior to the 2023-2024 biennium.

Report Methodology: DNRP gathered data from various internal and external systems, including from the cashiering system used at solid waste facilities for tonnage and revenue information, King County

⁴ A circular economy aims to eliminate waste and reuse and recycle all resources.

accounting and budget systems (Oracle) for expenditure information, and the PRISM database that provides expenditure forecasts for capital projects. Ideas and additional information were gathered through an internal DNRP Rates Task Force created in fall 2019. Briefings with the DNRP solid waste advisory committees – the MSWMAC and SWAC – started in December 2020 and continued monthly through development of this report. The committees provided input on a variety of topics including recycling fees, rate options, and service levels.

The methodology used in formulating the rate proposal is explained in detail below.

IV. Report Requirements

A. Rate Model Methodology

Disposal fees comprise 90 percent of DNRP’s revenue. Two variables control the revenue received from disposal fees: tonnage and the Basic Fee, or per-ton rate, charged for that tonnage. When tonnage falls, the per-ton rate increases. Since expenditures are largely fixed, smaller amounts of tonnage need to generate similar revenue and when that does not occur, the rate must increase. At a high level, the relationship between expenditures, revenue, tonnage, and rate can be characterized as shown in Figure 4:

Figure 4: Relationship of Expenditures, Revenues, Tonnage, and Rate

$$\text{Expenditures + Reserves} = \frac{\text{Revenues}}{\text{Tonnage}} = \text{Per Ton Rate}$$

Appendix B provides details of the rate model methodology.

B. Proposed Fees

DNRP is proposing the following per-ton rates for 2022:

Fee	2019-2021	2022
Basic Fee	\$140.82	\$154.02
Yard/Wood Waste	\$75.00	\$100.00
Regional Direct	\$120.00	\$131.00
Special Waste	\$169.00	\$185.00

The department charges a minimum fee on Basic Fee and Yard/Wood Waste charges on weights of 320 pounds or less. Some vehicles, such as passenger vehicles, are automatically charged at the minimum fee.⁵

⁵ KCC 10.40.020 MM defines fixed-rate vehicles.

The minimum fees are as follows:

Fee	2019-2021	2022
Basic Fee *	\$22.53	\$24.64
Yard/Wood Waste	\$12.00	\$16.00

*The fee shown here is pre-tax and without a Moderate Risk Waste surcharge.⁶

DNRP is also proposing the following new fee:

Fee	Type of Fee	2019-2021	2022
Mattress Handling Fee	Per Item	Charged at Basic Fee	\$30.00

The Mattress Handling Fee is a per-item fee that will be applied to each unit that is brought to a transfer station for disposal or recycling. Appendix B provides detailed information about this fee.

In addition, the department is proposing that the Cleanup Lift discount be raised to \$14.00, which, after taxes and fees, is roughly 50 percent of the minimum fee for garbage transactions.

C. Financial Projections

The revenue, expenditure, and reserve assumptions used to develop this proposal are detailed in this section.

Expenditures

Given the loss in tonnage from the diversion of C&D debris, DNRP was facing a revenue shortfall in the 2019-2020 biennium. The initial expenditure projection for the 2021-2022 biennium was \$352 million. This current projection used the 2019-2020 budget as the baseline, and then escalated it to account for inflation and the historic rate of expenditure growth.

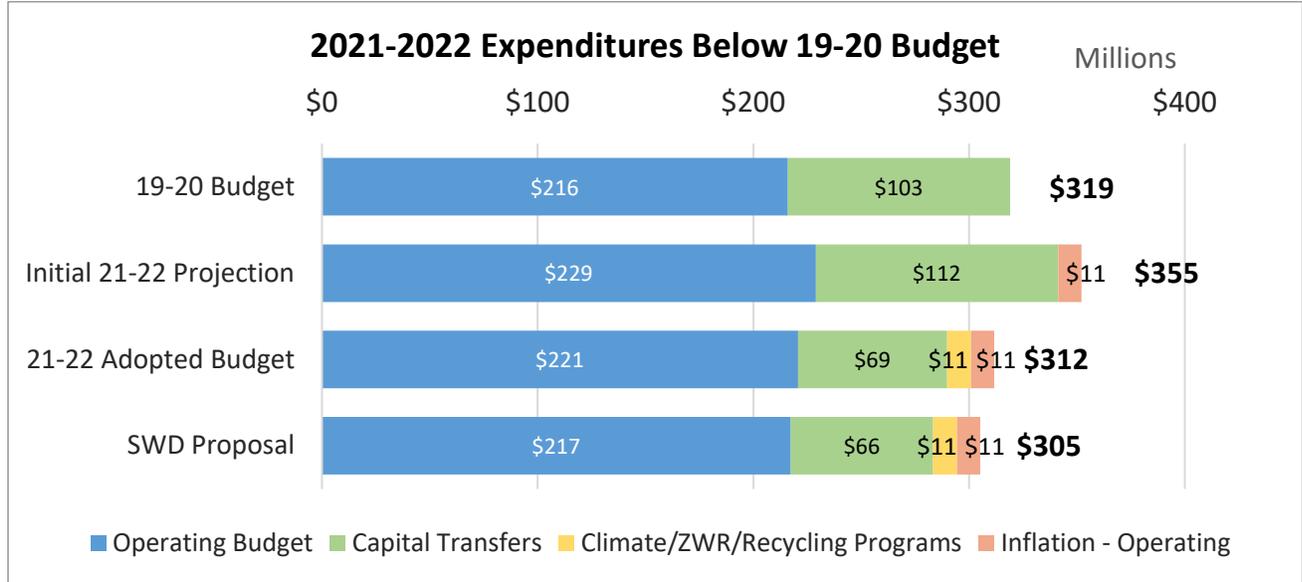
In response to the challenges created by the decline in tonnage, the department created an employee task force to generate ideas that would improve the financial position.

After the task force completed its work, the department was able to lower total expenditures by \$20 million. As impacts from the pandemic became evident, the department reevaluated all planned spending and further reduced expenditures by \$20 million for a total savings of \$40 million. The savings include reductions in consulting services that will result in less frequent waste characterization studies, suspending operations at the CHRLF on the weekends, and reconfiguring required safety meetings for operations staff to reduce labor cost and the need for outside trainers. Currently, the department's 2021-2022 adopted budget keeps expenditures at \$312 million, \$7 million below its 2019-2020 budget of \$319 million. The department has effectively absorbed all inflationary increases, while maintaining existing services and funding several new investments that will yield long-term financial benefits for the region.

⁶ The King County Board of Health sets the amount of the Moderate Risk Waste surcharge that funds hazardous waste programs throughout the county.

Furthermore, this proposal is based on a revised projection of \$305 million for the biennium, an additional \$6.5 million below the adopted budget largely attributable to a revised capital construction spending forecast (see Figure 5). However, even as expenditures have decreased compared to the last biennium, an increase in the rate is needed because of increases in construction-related debt. The revised construction forecast favors 2021 and 2022 but increases those costs in the future through at least 2026. More information on this can be found in the “Debt Service” section, below.

Figure 4: Comparison of 2019-2020 Budget and 2021-2022 Rate Proposal Expenditures



New Investments

The reductions in operating and capital costs enable the department to pursue other critical investments without increasing baseline expenditures. As part of its expenditure evaluation, the department evaluated existing programs and projects for alignment with its strategic goals and commitments from the Comp Plan. DNRP identified several new investments that would fulfill or strengthen these goals. These are listed below.

Improved Asset Management. The department has developed a comprehensive, holistic approach to maintenance and repair of its assets. Additional staffing and funding to implement this work will yield long-term benefits for rate payers, as a deliberate and planned approach to asset management will maximize the life of assets and reduce the more costly emergency repairs. The total proposed cost of this program will be \$2.4 million in the 2021-2022 biennium.

Expanded Safety and Emergency Response Capability. The department currently has a single safety officer dedicated to safety and emergency response across a multi-site, high-risk environment. This coverage is not sufficient. In addition to the need for expanded safety coverage, more advanced planning and training is needed to lead DNRP’s response to emergencies and protect public health and the environment. Recent examples include gas pipeline breaks, landfill fires, and COVID-19. Over time, expanded capacity through the addition of staff will yield long-term benefits from improved safety, reduction of accident claims and associated expenses, and risk avoidance. The total projected cost for the biennium is about \$700,000.

CDL and TSO Training Programs. In 2019, the department launched a training program that enables employees to obtain a Commercial Driver’s License (CDL), a prerequisite to becoming a DNRP Truck Driver. Successful completion of this training program provides access to higher-paying positions for the department’s lowest paid employees, and addresses the ongoing need to recruit new drivers, as many of the current drivers are at or near retirement age. In addition to continuing the CDL program, the department is creating an opportunity for employees to train as Transfer Station Operators (TSO), which will similarly address ongoing recruitment needs for this position. This program is forecast to cost \$300,000.

King County Conservation Corps. In 2019, King County piloted a new program for waste cleanup to support underserved needs in unincorporated King County. The program, which became a permanent service in 2021 pairs people struggling with homelessness with jobs performing litter and graffiti cleanup work in unincorporated business districts. The program is funded by DNRP and the Department of Local Services helps with coordination. The department will contribute just over \$500,000 in 2021-2022.

Recycling Cost Increases. With the enactment of China Sword, a policy that effectively banned the import of recycled materials into China beginning in 2018, the marketability of many recycled commodities declined. In addition, buyers of these materials are demanding lower levels of contamination, leading to increased processing costs. This has resulted in a steady increase in the cost of operating the department’s transfer station recycling program. Haulers and cities have already implemented surcharges to counteract this cost increase. This rate proposal represents DNRP’s first opportunity to address the impacts of China Sword. Transfer station recycling costs are projected to increase by \$1.7 million in the 2021-2022 biennium. To offset the increase in these costs, the department has increased the budget for recycling to ensure it can continue to provide these services.

Zero Waste of Resources. A major goal of the department, ratified by its partner cities and the King County Council through adoption of the 2019 Comp Plan, is to achieve zero waste of resources by 2030.⁷ It is estimated that 70 percent of the refuse that arrives at the CHRLF each year may have economic value. The Zero Waste of Resources Program aims to divert those materials from the landfill.

- DNRP has convened a task force of regional stakeholders to develop an implementation plan that will identify and prioritize actions needed to achieve this goal.⁸ The department set aside \$7 million for the 2021-2022 biennium to begin executing the implementation plan.

⁷ See 2019 Comprehensive Solid Waste Management Plan, Chapter 4—Sustainable Materials Management, page 75.

⁸ “Zero waste” does not mean that no waste will be disposed of; it proposes that maximum feasible and cost-effective efforts be made to prevent, reuse, and recycle waste. See 2019 Comprehensive Solid Waste Management Plan, Common Terms, page xiii.

- Achieving zero waste of resources will be an important milestone in developing a circular economy and offers financial benefits for rate payers. Implementation can create green jobs in the region: recycling creates 37 new jobs for every 10,000 metric tons recycled, and advanced sorting and reuse facilities can multiply this effect.^{9/10/11}
- Diversion of waste from the disposal stream can lower the monthly cost of trash service for businesses and residents. Since container size is the most important variable in determining the rate of curbside collection service, the impact of this change could create cost savings for customers in the region.¹²

Climate Change Mitigation Investments. The 2020 King County Strategic Climate Action Plan (SCAP) included the commitment that DNRP achieve carbon neutrality by 2025. To reach this target, the department has set aside \$2 million in revenue from the sale of landfill gas to BEW for investments that will help reach this goal. Planned actions include the purchase of electric vehicles, improvements to landfill gas collection systems, and purchase of “green diesel” to fuel the department’s solid waste fleet.¹³ In addition to reducing the carbon footprint of the department, these investments will yield long-term financial benefits for rate payers, as electric vehicles are less expensive to operate and maintain, and improvements in gas collection will increase revenues from this source.

Interim Facilities for Operations. Area 8, the current active disposal cell where waste is placed at the CHRLF, is expected to reach capacity in 2026. The construction of additional capacity will need to commence in 2023, with any necessary preconstruction occurring in 2022. In order to develop Area 9, the last remaining cell at the landfill, support facilities such as maintenance buildings and office trailers will need to be relocated. To reduce overall project cost and risk, the department will relocate most of the landfill operations staff to interim facilities in 2021. This will enable greater schedule flexibility for the complex landfill development process and allow the department to avoid the high cost of a direct move to permanent facilities. The leasing and relocation costs are expected to total \$5.1 million in 2021-2022.

Cost Savings

In response to the loss in tonnage from the C&D ban and the effects of the COVID-19 pandemic, the department has been reviewing its expenditures for potential cost savings. The largest areas of cost reduction are outlined in the following section.

⁹ Green jobs are jobs that generate income sufficient to support a household in King County and benefit the environment, such as working at a facility that recycles plastics.

¹⁰ See “[Recycling Saves Resources and Creates Green Jobs](#).” The EPA Blog, November 16, 2015.

¹¹ See “[Recycling Means Business](#).” Institute of Local Self-Reliance, February 1, 2002.

¹² See “Curbside Impact” section of this report.

¹³ Green diesel is a renewable fuel that is similar to regular diesel at the molecular level but is derived from renewable sources such as beef tallow instead of petroleum. This means it has a lower greenhouse gas impact than regular diesel fuel.

Operational Efficiencies. Through the internal Rate Task Force process, the department identified \$3 million in operational efficiencies spread over several projects and programs. Examples include the purchase of a shredder which will turn dirty wood¹⁴ into material that can be used as a base for temporary roads and tipping pads at the landfill; adding an electrician to operations staff to provide in-house maintenance; and eliminating unneeded portable toilets from several facilities.¹⁵

Closure of Cedar Hills on Weekends. DNRP will no longer process waste on Saturday and Sunday, the lowest tonnage days of the week, and will save an estimated \$2.9 million this biennium through reduction in staffing levels.

Recessionary Effects of COVID-19. Spending projections have fallen by about \$12 million as a result of effects from the COVID-19 pandemic. The major decrease is from lower wage increase projections (cost of living adjustments) set by the County.

Landfill Reserve Fund. The Landfill Reserve Fund (LRF) serves two functions for the department: it provides funding for new development and closure projects at the CHRLF and provides funding for post-closure maintenance. The department is projected to save \$14 million in the 2021-2022 biennium, as both the per-ton transfer rate (from the Operating fund to the LRF) and the tonnage have declined.

- **New Development.** Traditionally, new landfill development and closure projects were cash-funded from the LRF.¹⁶ Given the constraints on the rate and planned development of Area 9, debt-financing these projects can provide relief to rate payers.
- **Post-Closure Maintenance.** The Washington Department of Ecology requires landfill owners to set aside funds to pay for 30 years of post-closure care. Years with lower tonnage, which have lower rates of transfer, effectively increase the life of the landfill, increasing the time period over which the post-closure funding is collected.

Capital Equipment Replacement Program (CERP) Transfer. Traditionally, the department has maintained reserves equal to 15 percent of the value of its rolling stock¹⁷ in the CERP. Given the increased fiscal demands DNRP is facing, it was deemed prudent to lower the reserve amount to 10 percent of the rolling stock value, or just under \$10 million. This ensures adequate funding to deal with emergencies, without overburdening rate payers during a recession. This change, coupled with the existing fund balance, allowed the department to reduce CERP transfer levels by \$7 million without impacting the needed equipment purchased in the 2021-2022 biennium.

¹⁴ Dirty wood is wood treated with preservatives such as creosote, including dimension lumber. This may also include some treated plywood, strandboard, chemically treated wood. This also includes wood contaminated with other wastes in such a way that they cannot easily be separated but which consists primarily (over 50 percent) of wood. An example is wood with sheetrock attached.

¹⁵ A tipping pad is a solid piece of ground on top of which a garbage tipper is placed. Garbage tippers take trailers full of garbage and tip them over the face of the landfill into the cell where waste is placed. Because this happens on top of garbage, a sturdy surface is needed.

¹⁶ KCC 4A.200.390, which governs the LRF, will be updated through the rate ordinance to explicitly allow bond proceeds to fund these projects.

¹⁷ Rolling stock is equipment that is commonly used and replaced on a set schedule based on the balance between capital depreciation and maintenance costs, for example, tractors and trailers, pool sedans, and yard goats.

Debt Service. The department is expected to save \$4.2 million in debt service in the 2021-2022 biennium, compared with the adopted budget for the same biennium. This is primarily due to a shift in project schedules that has changed cash flows, as well as the decision to delay construction of permanent support facilities until after completion of three major construction projects: Area 9, South County Recycling and Transfer Facility, and Northeast Recycling and Transfer Facility. This change was made possible by re-sequencing landfill development work, which resulted in additional savings during the biennium, and the decision to move into interim facilities while Area 9 is developed.

Furthermore, DNRP annually reviews its Capital Improvement Program to update planned spending on existing projects and decide what other projects are needed. Starting this biennium, many of the updated cash flows are multiplied by an accomplishment rate (85 percent) and these lower amounts are used to project the needed bond issuances and estimate the cost of debt service over the next six years. Assuming an accomplishment rate of less than 100 percent is a practice used by other departments and reduces the accumulation of premature debt issuance, which puts downward pressure on the rate.

Reserves

The department has three reserve funds. The Rainy-Day Fund is required by County policy and is equivalent to thirty days of operating expenses. No significant changes to this fund are planned. Two other funds, the Recession Reserve and the Rate Stabilization Reserve, will be impacted during the 2021-2022 biennium.

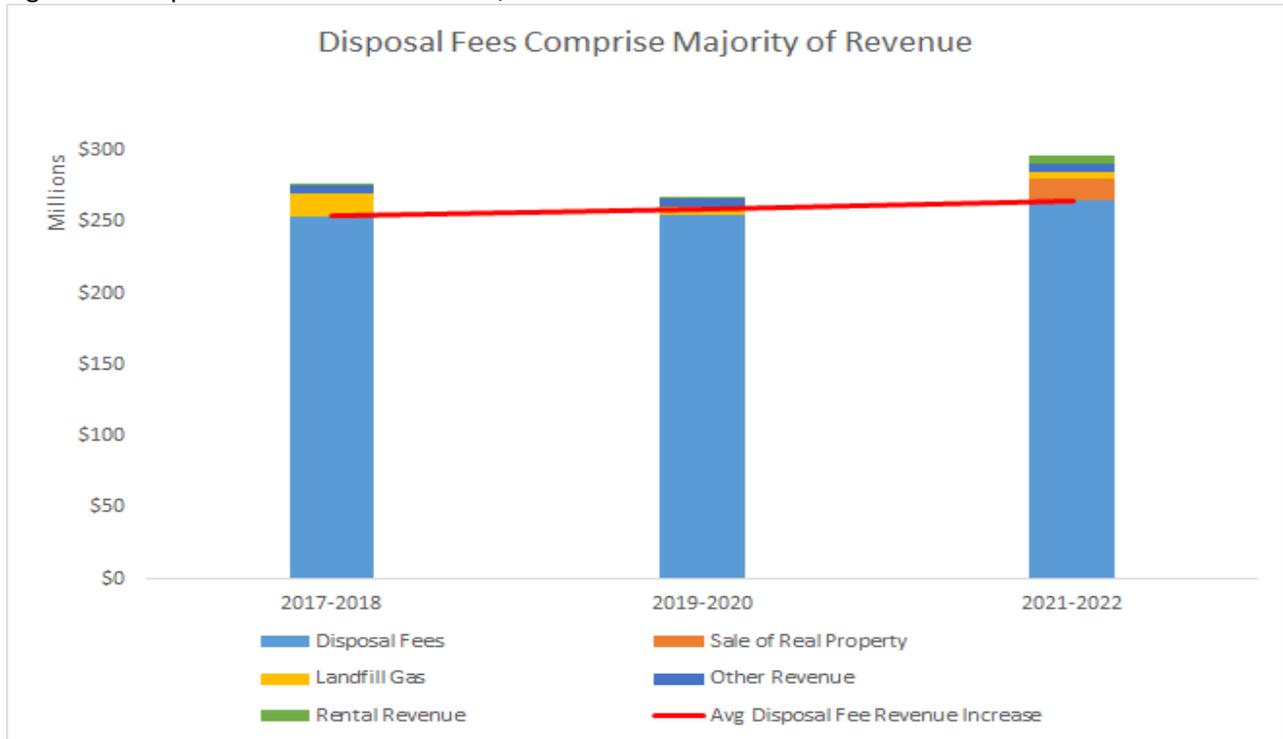
Recession Reserve. The Recession Reserve is meant to provide a buffer to rate payers in the event of a recession. This fund is equivalent to 5 percent of annual disposal revenue and is meant to be drawn down over the course of two years. After a period of recovery, the department will gradually replenish the fund. With the onset of a recession in 2020, the department began to draw down the reserve. In 2022, the department plans to leave this fund at \$0, and begin replenishing it in 2023 at a rate of 1.6 percent of annual disposal revenues per year, to a maximum of 6.4 percent of annual disposal revenues.

Rate Stabilization Reserve. The Rate Stabilization Reserve for 2020 is expected to be \$37 million. The department plans to spend down this reserve by an average of \$5.6 million a year to lower and smooth rates until reaching a target of approximately \$4 million at the end of 2027.

Revenues

Disposal fees comprise 90 percent of the DNRP's solid waste revenue. The successful implementation of the C&D debris diversion resulted in actual revenues falling seven percent below projections used in the prior rate model. The department is using a two-pronged strategy to stabilize revenues in the 2021-2022 biennium. First, the sale of surplus property will generate revenue to soften the direct burden on rate payers. DNRP also received \$7 million in a settlement with BEW regarding underpayment for landfill gas provided for conversion to natural gas. In total, these sources are projected to generate \$23 million in revenues. Second, the department is proposing an increase in its tipping and yard/wood waste fees, and the addition of a new per-item charge for mattresses. These increases will result in disposal fee revenue increasing for the 2021-2022 biennium. See Figure 6 below:

Figure 6: Comparison of Revenue Sources, 2017-2022



The average rate of increase for disposal fee revenues is 2.1 percent per biennium, well below the 5 percent average rate of increase in inflation over the same period. Because of declining tonnage, revenue stabilization can only be achieved through an increase in the rate.

Disposal Fee Revenues. DNRP is proposing an increase in its tonnage-based fees, yard/wood waste fee, and the creation of a new per-item charge for mattresses. Typically, the department sets these rates on a biennial basis, but DNRP is now proposing annual increases. Smaller, more frequent increases will minimize the burden on rate payers and create a smoother, more predictable situation for customers and are preferred by our stakeholders.

The rationale and revenue projections for each fee are summarized as follows:

- Basic Fee.** The Basic Fee is the per-ton fee charged to customers disposing of municipal solid waste at transfer facilities and to curbside collection vehicles at the CHRLF. In 2021, DNRP did not increase the fees to avoid putting additional pressure on rate payers and city partners during the pandemic. The department is proposing to increase the fees by 9.4 percent, to \$154.02, in 2022. The impact of this increase for a typical residential customer, after commercial haulers pass on these costs, is forecasted to be \$0.71 per month in 2022. The increase in Basic Fee is projected to increase revenues by approximately \$12 million in the 2021-2022 biennium above what they would be if the current rate were maintained.
- Regional Direct Fee.** This is a discounted fee charged to commercial collection companies that haul solid waste to the CHRLF from their own transfer stations and processing facilities, thus bypassing County transfer stations. Regional Direct tonnage is composed mainly of non-

recyclable material removed from recyclables during processing at material recovery facilities (MRFs). Regional Direct fees are typically set at 85 percent of the Basic Fee, so this fee is increasing from \$120 per ton in 2020 to \$131 per ton in 2022. This increase is expected to bring in \$200,000 more in revenues in 2021-2022.

- **Special Waste.** The fee charged for certain materials that require special handling, record keeping, or both, such as asbestos-containing materials and contaminated soil. This fee is typically set at 120 percent of the Basic Fee, so this fee is increasing from \$169 per ton in 2020 to \$185 per ton in 2022. This increase is expected to bring in \$24,000 more in revenues in 2021-2022.
- **Mattress Fee.** Traditionally, mattress disposal has been charged at the Basic Fee, but the cost of transporting used mattresses to the landfill, as well as fees charged to the department by third-party mattress recyclers, makes these materials expensive both to dispose of in the landfill and to recycle. Therefore, the department has decided to begin charging a fee of \$30 per mattress at all locations. Appendix C provides more information. This fee is projected to generate \$300,000 in revenues this biennium.
- **Yard/ Wood Waste Fee.** This fee is for separated yard waste and clean wood brought to facilities that have separate collection areas for these materials. The fee has been set at \$75 per ton since 2011. To bring the fee more in line with the cost of this service, the department is proposing to raise the fee to \$100 per ton. For a more detailed analysis of this fee adjustment, please see Appendix D. This fee will increase projected revenues by about \$642,500 for the biennium.
- **Increased flow control.**¹⁸ In 2019, the department increased enforcement of flow-control agreements in regard to Regional Direct tonnage, which consists of non-recyclable materials collected at MRFs. This change resulted in the department increasing its projected tonnage from this source by 5,000 tons over prior projections. This will increase the department's revenue by about \$300,000 annually. The proper disposal of this material--collected in the King County solid waste service area but sorted at MRFs in Seattle--is under discussion between DNRP and the City of Seattle, thus receipt of these materials may change in the future.

Other Revenues. DNRP has also investigated ways to increase its other revenue streams.

- **Sale of Surplus Property.** The department recently sold a parcel of surplus property in Eastgate, near the Factoria Recycling and Transfer Station. At the time of this writing, the amount DNRP will be compensated--which involves reimbursement and costs from other departments--has not been finalized. However, it is expected the sale will net at least \$16 million, which is already assumed in the rate model.
- **Rental Income.** The department has been able to secure a new tenant at its Harbor Island property to generate additional income.
- **Sale of Landfill Natural Gas.** Landfill gas is captured at CHRLF and converted to pipeline-quality natural gas by BEW. The natural gas is sold to Puget Sound Energy (PSE) and the revenue shared between BEW and the department. In addition, carbon credits, which are owned solely by the department, are sold to PSE, which brokers it on the secondary market.

¹⁸ Flow control refers to the requirement in KCC 10.08.020 that all solid waste generated in the King County system must go to a King County facility.

The most recent total revenue projected in the rate model for the 2021-2022 biennium is \$306 million. Revenue from disposal fees is projected to be \$265 million. An additional \$41 million is projected from other revenue sources.

D. Rate Determination

Each biennium, DNRP needs to raise revenue equal to its projected expenditures and required reserves. The amount of revenue can be buffered by the existing balance in the Rate Stabilization Reserve, but at the end of each biennial cycle, the department must have enough cash on hand to fund its required reserves.

Since revenues are largely based on disposal fee revenue, the amount of tonnage is a key variable in determining the rate. The department has been facing declining tonnage since 2018. Expenditures are relatively insulated from the effects of tonnage declines because 90 percent of the department's expenditures are fixed.

Recognizing the challenges posed by the loss in tonnage, the department has been working to address the revenue shortfall with cost savings. Expenditures for 2021-2022 will decrease slightly from the 2019-2020 budget, a decrease in \$40 million from initial projections. Despite these savings, a rate increase is needed due to increasing debt service associated with major construction projects and investments in climate and environmental programs.

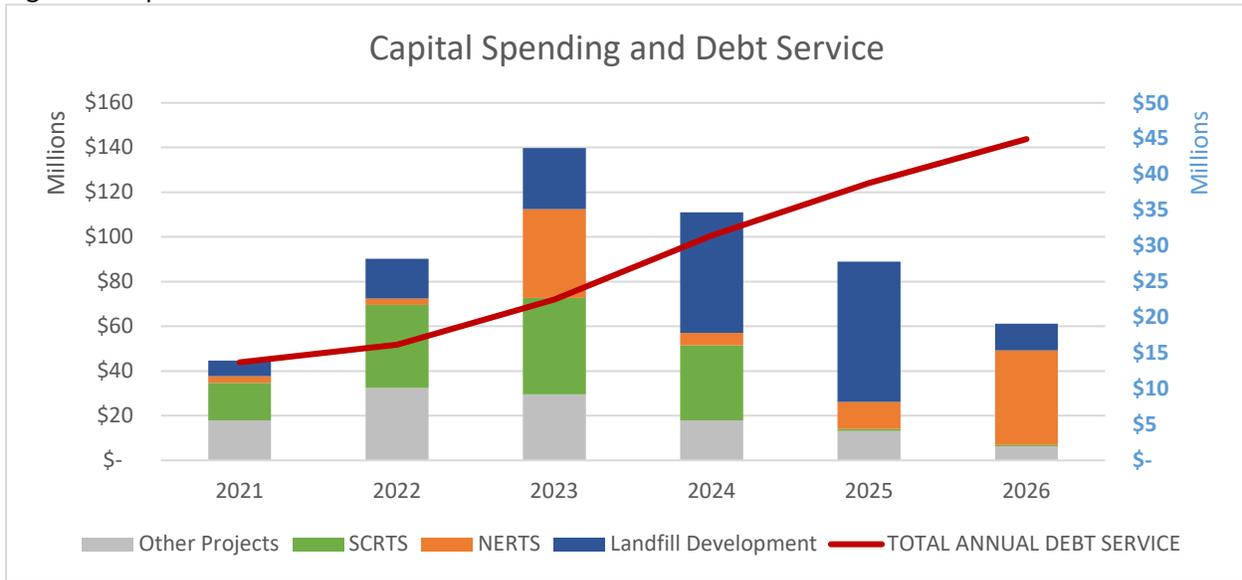
In addition to reviewing all expenditures for potential savings, the department is expected to realize additional revenue from the sale of surplus property in the 2021-2022 biennium. The department also examined its reserve levels. The Recession Reserve, which provides additional rate reserve, was depleted by the end of 2020. Additionally, the Rate Stabilization Reserve, which is used to smooth future rate increases, will be gradually drawn down over the next several years.

Once these projections were finalized, the department calculated the rate necessary to sustain the department through the end of 2022, but with an eye on needed near-term future rate increases. Many options were considered, and all were evaluated for risks and benefits to rate payers. Ultimately, the department sought to balance the immediate need for rate relief in 2021 with the long-term financial health of the department, and the environmental health of the region. DNRP believes that its current proposal strikes a balance between all three criteria.

Understanding the Rate Increase

Items that increased the rate include funding the increased cost of transfer station recycling, the Zero Waste of Resources implementation plan, and new investments in operations and support services. Capital programs and LRF changes provided the most relief in 2021-2022, and reductions to operations, recycling, and support services round out the reductions. However, as mentioned above, capital spending on critical infrastructure alone will put pressure on rates through 2026 as illustrated below in Figure 7.

Figure 7: Capital Costs Drive the Rate Increase



No-Increase Options

Several cities asked DNRP to forego a rate increase entirely in 2021 and the department was able to do so. However, doing so again in 2022 would require DNRP to further reduce expenditures, or face a 15 percent increase in 2023. Considering expenditure reductions already made, and DNRP's operational budget for the transfer stations, landfill, and transportation is about \$60 million per biennium, the impacts of additional reductions would mean the department would likely need to consider reducing service levels.

In view of the continued pressures of the COVID-19 pandemic, the department analyzed what service level reductions would be needed to avoid an increase in 2022 and mitigate the expected 15 percent jump in 2023. The service level changes needed to mitigate an increase of that magnitude in 2023 include shutting down the Renton Transfer Station and the Cedar Falls Drop Box; closing remaining transfer stations Friday through Sunday; and closing the CHRLF on Saturday (which is in addition to Sunday that is already included in the adopted budget). DNRP would also need to lower proposed investments in zero waste of resources and climate change mitigation actions, which were approved in the Comp Plan. This could disrupt DNRP's ability to meet its 2025 carbon neutrality goal unless it purchases carbon credits to offset emissions. The department may also have to eliminate city recycling grants, with the result that cities would be less likely to offer popular recycling collection events.

Given the nature of these service reductions, there would be impacts to all users of the system. Sanitation is an essential service and limiting access to it has a number of negative consequences. For example, in addition to the direct impact on service access, station closures would increase traffic near the stations during times stations are open, cause long lines and service delays, and result in some loss of flow control as self-haulers may then dispose of their waste in other jurisdictions. In addition, there might also be some increase in illegal dumping that would require mitigation. Increased costs, such as traffic control and cleanup of illegal dumpsites, and decreased revenue from tonnage going to other solid waste systems (Snohomish County, Seattle, or Pierce County) would require additional service level reductions to compensate.

These changes would increase costs for haulers because they would need to purchase more trucks and hire more staff to move the same amount of waste over fewer days. It could also impair their ability to deliver contractually obligated levels of service. In areas governed by the Washington Utilities and Transportation Commission, which includes all of unincorporated King County and some municipal areas, the cost increases could be passed directly on to customers. In areas governed by city contract, administrators may be faced with the choice to accept lower levels of service, terminate contracts for cause, or agree to service cost increases. For most residential customers in the region, the “no increase” option for disposal fees in 2022 would result in either (1) increases in service costs, due to haulers passing on the costs to purchase new trucks and hire staff, or (2) decreases in the frequency of services, should haulers decide to cut service to reduce costs instead of increasing their fees. If the latter option resulted in customers having to increase the size of their curbside bins, the total monthly impact would likely be higher than the curbside impact of the proposed increase in disposal fees (as illustrated in the Curbside Impact section of this report). Thus, the “no increase” option could result in higher overall bills for many customers.

While DNRP has the option of reducing funding for zero waste of resources and climate change mitigation in the short-term, the department is committed, by ratification of the cities and the King County Council, to achieving these goals within the timeframes specified by the Comp Plan and the SCAP. Reducing investment in zero waste of resources actions will compress the timeline for achieving the goal by 2030. As many of these actions require a period of years to implement, such as improving markets for recyclables or building new sorting/processing facilities, the delay could challenge the department’s ability to implement these actions.

A delay in funding could cause the department to miss an opportunity to create the “green jobs” that come with some of these actions during the economic downturn. The Environmental Protection Agency estimates that every 10,000 metric tons of materials recycled generates 37 jobs, so building a new sorting/processing facility could generate potentially hundreds of new jobs.¹⁹ Reducing investments in climate change mitigation will also result in compression of the schedule for DNRP achieving the County’s policy of carbon neutrality by 2025. In essence, the reductions would narrow the strategic pathways for achieving these goals and could require that the department elect more accelerated, and expensive, solutions in later years. It would also result in the need to increase funding in the 2023-2024 biennium.

DNRP shared these options with city and hauler partners and, given the negative impacts described above from pursuing a no-rate increase option, these partners recognized the need for a rate increase to support the regional solid waste system and ensure continued progress on key capital projects and environmental goals. The average cost to monthly customers resulting from the proposed rate is \$0.71 in 2022 and puts the department on a path to meet its obligations and goals, while keeping monthly customer cost increases under \$1.00.

¹⁹ <https://blog.epa.gov/2015/11/16/recycling-saves-resources-and-creates-green-jobs/>

E. Curbside Impact

In developing this rate proposal, DNRP calculated the likely impact of a rate increase on curbside customers using an estimate of the average monthly weight of about 100 pounds of garbage generated by a typical residential household.²⁰²¹

	2021	2022	2023	2024	2025	2026
Basic Fee	\$140.82	\$154.02	\$168.45	\$184.24	\$201.50	\$219.89
% Increase	0%	9.4%	9.4%	9.4%	9.4%	9.1%
Estimated Monthly Curbside Increase	\$0.00	\$0.71	\$0.78	\$0.85	\$0.93	\$0.99

While this method provides insight into the overall regional average, it is important to remember that residential customers are charged by the size of their bin, or cart, rather than by weight. Thus, the actual impact is dependent on how the increase in Basic Fee changes the monthly charge for each particular cart size and how those cart sizes are distributed in the population. Each contract between a city and its hauler(s) contains provisions for how the Basic Fee will be applied to the existing fee schedule, so this calculation will vary by area based on the contract.

To provide a sense of how the Basic Fee will impact actual contractual rates, DNRP has included an analysis of one city's contract:

Cart Size (gallons)	No. of Customers	Total Monthly Cost	Disposal Cost	
		2021	Current 2021	Increase 2022
20	1,691	\$12.52	\$3.33	\$0.31
35	7,564	\$17.60	\$5.82	\$0.55
64	2,326	\$34.38	\$10.65	\$1.00
96	1,305	\$53.18	\$15.94	\$1.49
Average Curbside Increase				\$0.44

Under this contract, the actual cost to customers consists of two separate components: the disposal cost and the service cost. Increases to the disposal cost are determined by increases in the Basic Fee charged by DNRP. The service cost compensates the hauler for their collection services.

On average, residential curbside customers in this city will see the disposal cost component of their bill increase by \$0.44 per month in 2022.

²⁰ A curbside customer is someone who pays a monthly garbage bill to have garbage picked up at the curb. These are mainly single-family residents.

²¹ The actual curbside impacts for curbside customers will vary based on local retail collection rates, cart size, and how the terms of the contract between their city and their hauler pass through these disposal costs to customers. Variations in these factors create hundreds of possible individual impacts, which is why the department uses an average impact measure.

Notably, the amount of increase year to year is smaller than the impact of cart size. As noted above, in 2021, the total cost for a 20-gallon bin is \$12.52 and for a 35-gallon bin, \$17.55. As the department takes action to achieve its zero waste of resources goal, residents and businesses should see financial benefit through the reduction of their cart size and thus their total monthly bill. For example, implementing cart tagging – where a person gets an “oops” tag on their garbage bin if they put recyclables in the garbage can – has led to behavior change where people learn to recycle more. If they recycle more, they can move to a smaller garbage can and save money. This analysis illustrates the tangible benefits of investing in zero waste of resources actions.

V. Conclusion

Entering into this rate development period, DNRP was facing two years of declining revenues, due to the successful implementation of the C&D ban. The emergence of the COVID-19 pandemic created uncertainty and required the department to do what it could to avoid a rate increase in 2021, which it accomplished. However, as the region begins to emerge from the threat of the pandemic, city and hauler partners still wish to see DNRP build two new transfer stations and make planned investments in climate and environmental programs.

On the expenditure side, the department has been working to address increased capital costs with rate savings elsewhere. Spending has been prioritized to focus on maintaining delivery of essential services and delivering on the commitments made in the Comp Plan and the SCAP. New investments in zero waste of resources and continuation of capital projects are expected to provide economic stimulus during the economic recovery period. As noted earlier, zero waste of resources could create hundreds of new green jobs while the spending on the South County Recycling and Transfer Station project is expected to create about 1,400 new jobs based on the Washington State Office of Financial Management’s labor multiplier model.²² Employees from across the SWD have been engaged to develop ideas for cost savings and improving operational efficiencies. This approach has succeeded, and expenditures for 2021-2022 will be \$7 million less than the 2019-2020 budget, a decrease in \$40 million from initial projections. All inflationary pressure has been absorbed within existing spending levels, meaning that in constant dollars, DNRP expenditures for operation of solid waste programs and facilities have fallen \$16 million.

The focus on the revenue side has been one of gradual increases. A proposed one-year rate increase in disposal fees will result in disposal fee revenues increasing at an average rate of 2 percent per biennium since 2017-2018, which is lower than the 5 percent average rate of inflation. The economic recession caused by the COVID-19 pandemic has challenged budgets across the county, whether for households dealing with job losses and illness, businesses absorbing losses from closures and increased operational costs, or municipalities facing falling revenues. During this rate-setting process, the department has been sensitive to the needs of its customers and stakeholders and worked to reduce the need for rate increases, while preserving essential services and providing investments needed to reach the County’s strategic goals and commitments. The decision to forego a rate increase in 2021 coupled with this 2022 rate increase proposal balances the immediate need for rate relief in the region with the ongoing need for waste disposal and the long-term financial and environmental impacts to future rate payers.

²² <https://ofm.wa.gov/washington-data-research/economy-and-labor-force/washington-input-output-model/2007-washington-input-output-model>

VI. Appendices

Appendix A – Proposed Solid Waste Disposal Fees for 2022 Brief

Appendix B – Rate Methodology

Appendix C – Mattress Fee Analysis

Appendix D – Yard/Wood Waste Fee Increase Analysis

Appendix E – Tonnage Forecast Through 2026

Appendix F – Summary of Rate Model Through 2026



King County

Appendix A

Proposed 2022 Solid Waste Disposal Fees Brief

A 9.4 percent increase in King County's Solid Waste Basic Fee is proposed for 2022, from \$140.82 to \$154.02, which amounts to an average of \$0.71 to customers' monthly curbside bill. In order to provide relief to ratepayers dealing with the economic fallout of the COVID-19 pandemic, King County did not increase the Basic Fee in 2021. The proposed 9.4 percent increase in 2022 will allow the County to continue to maintain reliable and essential waste and recycling services.

The proposed legislation would allow the continuation of projects outlined in the *2019 Comprehensive Solid Waste Management Plan (Comp Plan)*, including capital projects such as the South County Recycling and Transfer Station in Algona, the future Northeast Recycling and Transfer Station, and further development at the Cedar Hills Regional Landfill. Investment in these critical infrastructure projects will bring estimated total capital spending to close to \$500 million through 2026. This will greatly increase debt service and drive up rates for the next several years, and thus raising rates now will mitigate a larger spike in the future.

The following changes to the Solid Waste Fund rate schedule are proposed:

- Increase the per-ton fee for yard and wood waste from \$75 to \$100. The estimated cost to DNRP to provide this service is \$115 per ton.
- Add a new Mattress Handling Fee of \$30 per unit to cover the cost of recycling/disposal of mattresses.
- Make permanent the CleanUp Lift low-income discount program and increase the discount from \$12 to \$14 to keep it at approximately 50 percent of the minimum disposal fee.

Drivers for the proposed 2022 rate

1. **The rate funds capital projects and programs that provide economic stimulus.** Continued modernization of the transfer system, expanding capacity at the Cedar Hills Regional Landfill, and other upcoming capital improvement projects are estimated to create about 1,400 living-wage jobs.¹ In addition, decreasing the amount of garbage sent to the landfill by recovering resources that have economic value will create hundreds of new green jobs in recycling.
2. **The rate keeps the department on track to fulfill its goal of reaching climate neutrality in 2025.** Instead of using landfill gas sales to buy down the rate, the department will now use that revenue to pivot away from traditional fuel and other sources of greenhouse gas (GHG) emissions and to focus on green innovations such as electric trucks, renewable diesel, and other low-emission technology. Funding transfer station recycling also helps reduce the department's carbon footprint and maintain carbon offsets.

¹ Based on the Washington State Office of Financial Management's labor multiplier model: [LINK](#)



King County

Appendix A

3. **The rate funds vital and valued programs and services.** Customers have repeatedly shown their support and desire for programs and services that make their communities better places to live. The region is known for its commitment to recycling, and customers understand that modest rate increases support enhanced recycling services, especially in communities that currently lack those services.
4. **The rate proposal delivers value for customers through \$40 million in cost cuts and deferred spending identified by employees.** These savings allowed King County to avoid a rate increase for 2021 but do not eliminate the need for an increase in 2022. This proposed increase is approximately 5 percent lower than the 14 percent increase for 2022 assumed in the 2021-2022 Adopted Budget.
5. **The rate keeps the promises made in adopted and approved policies.** Approval of the rate proposal means that King County can honor its obligations and advance goals outlined in the King County Code, Strategic Climate Action Plan, Comp Plan, and Equity and Social Justice Strategic Plan.
6. **A “no-rate increase” option carries risks and consequences.** Foregoing an increase again in 2022 would create a need for double-digit increases in future years due to depletion of the rate stabilization reserve and large increases in debt service anticipated from development of critical infrastructure capital projects. While a “no-rate increase” option may seem prudent as the region continues to grapple with the economic effects of the COVID-19 pandemic, there is much to lose with this option. Deferring investments in the solid waste system would result in short-term savings yet shift the financial burden into future biennia. This would negatively impact customers, haulers, community members, partners, and stakeholders. For example:
 - **Closing transfer stations Friday through Sunday:** Increased wait times, drive times, and costs for self- and commercial haulers; increased traffic on city streets during operating hours; commercial haulers passing added costs directly onto curbside customers; and a possible increase in illegal dumping.
 - **Eliminating recycling at transfer stations:** Increased GHG emissions and delayed attainment of carbon neutrality by 2025.
 - **Eliminating investment in the Zero Waste of Resources Plan:** Potential delays in development of a recycling processing facility that will create new jobs or missed opportunities for improving recycling.
 - **Eliminating city recycling grants:** Cities would be less likely to offer popular recycling collection events.
 - **Reducing GHG mitigation:** Missed goal of carbon neutrality by 2025; necessity for increased financial investments in the next biennium; purchase of carbon credits to offset emissions, with less benefit than actual reductions in GHG emissions; and loss of ancillary benefits such as reduced air pollution.
 - **Closure of facilities, including Renton Transfer Station and/or Cedar Falls Drop Box:** Layoffs of operations staff and uneven distribution of service.

These cuts would slow the achievement of regional environmental goals outlined in the King County Code and the Comp Plan; require more dramatic spending increases in future years to reach these goals; and anger customers, as occurred in 2013 when the department cut recycling services at transfer stations to reduce



King County

costs. Public support for these services is clear; and investing in a modest rate increase now will benefit our customers while contributing to a greener more sustainable future.

Solid Waste Rate Methodology

The rate model seeks to balance expenditure and reserve requirements with anticipated revenues. The ending fund balance can be carried over from prior years in order to smooth out demands on revenues from one biennium to the next. A description of each of the major components is provided below.

Expenditures

Expenditures can be divided into two major categories: (1) operating expenditures and (2) capital fund transfers/debt service. Within operating expenditures, the model distinguishes between expenditures for ongoing programs and projects and new budgetary additions to expand or augment existing operations.

Operating Expenses

Existing Operational Footprint

Projected spending levels for existing solid waste operations are calculated by reviewing the current biennial budget, actual spending levels for the biennium, and the *pro forma* budget for the upcoming biennium. Differences between the existing budget, actual spending levels, and the *pro forma budget* are reconciled to create a projected spending level for the upcoming biennium. For some items, the expenditure levels are directly related to tonnage or revenue projections and thus are calculated based on the tonnage and/or revenue forecasts.

New Budgetary Additions

As part of the rate development process, the Department of Natural Resources and Parks (DNRP) identifies the need for new or additional funding across each section. Once new funding needs are identified, such as new programs or bodies of work to meet County goals, an evaluation process is used to prioritize and assess them.

Operational Efficiencies

King County and DNRP are committed to financial stewardship. DNRP employees are empowered to find ways to operate more efficiently and save money for rate payers. The department looks for operational efficiencies on an ongoing basis and evaluates options for expenditure reduction as part of its biennial budget and rate-setting process.

Capital Expenditures, Landfill Reserve Fund, and Debt Service

The County funds capital projects and post-closure obligations at the Cedar Hills Regional Landfill (CHRLF) through direct cash transfers to capital funds or by using bond funding to raise additional revenue. Three capital funds are used for this purpose: the Solid Waste Construction fund, the Solid Waste Capital Equipment Replacement Program (CERP) fund, and the Landfill Reserve Fund (LRF), which provides funding for capital projects at the landfill and is a reserve account for the post-closure maintenance of the landfill.

Construction Transfer

Typically, transfers of \$4 million per biennium from the operating fund to the construction fund are made to fund small capital projects where bond financing is not appropriate. This amount is evaluated biennially as part of the rate-setting process.

CERP Transfer

An annual spending plan is developed to address anticipated needs for equipment replacement over the next six years. The transfer rate is calculated to provide the necessary funding for the planned spending above the required reserve amount.

LRF Transfer

The LRF amount is calculated on a per-ton basis. Key variables include the tonnage forecast, the estimated date that the CHRLF will reach capacity, and the projected cost for post-closure activities. Traditionally, new landfill development and closure projects were cash-funded from the LRF. Given the constraints on the rate and planned development of Area 9 at the CHRLF, it became apparent that debt-financing of these projects would provide significant relief to rate payers. KCC 4A.200.390, which governs the LRF, was updated in 2020 to explicitly allow bond proceeds to fund these projects.

Debt Service

DNRP annually reviews the solid waste Capital Improvement Program to update planned spending on existing projects and decide what other projects are needed. The cash flows are then multiplied by an accomplishment rate (typically 85 percent) and these amounts are used to project the needed bond issuances in order to estimate the cost of debt service over the next six years. The projected amount of new debt service is added to the scheduled debt service to arrive at an estimated expenditure in the rate model.

Reserve Requirements

Three reserve funds are utilized by the department in accordance with the County's financial policies—the Rainy-Day Reserve, the Recession Reserve, and the Rate Stabilization Reserve.

Rainy-Day Reserve

King County Comprehensive Financial Management Policies require that operating funds include a Rainy-Day Reserve. This reserve is equal to 30 days of operating expenditures.

Recession Reserve

This reserve provides a buffer for the rate in case of a recession. Set at 5 percent of annual disposal revenue, it is meant to protect the rate payers from financial shocks due to falling tonnage resulting from a recession. In years with a recession, this fund is intended to be drawn down by no more than 50 percent per year. After the recession has ended, the fund is gradually replenished over a five-year period.

Rate Stabilization Reserve

The rate stabilization reserve allows balances to be carried over between biennia, which can smooth revenue demands over time. This creates a more predictable path for rate payers.

Revenues

About 90 percent of revenue supporting the County's solid waste activities comes from disposal fees. Other important sources of revenue include the sale of gas collected at the CHRLF, rental income from real property owned by the Solid Waste Fund, a fee from construction and demolition waste collected at third-party recycling facilities, and the commodity value of recyclables collected at the transfer stations. Reimbursement income revenue is received from the Hazardous Waste Management Program in exchange for providing Moderate Risk Waste (MRW) collection services. Miscellaneous sources of revenue include various grants, interest earnings, and other small-dollar sources.

Disposal and Recycling Fees

Disposal and recycling fees are collected on a per-ton or per-item basis, depending on the material. The projected revenue for this source is calculated using the tonnage forecast. The rate model is used to determine the basic fee needed to balance the expenditure and reserve requirements once all other revenue sources are incorporated into the model.

Per-Ton Fees

- **Basic Fee.** The per-ton fee charged to customers disposing of municipal solid waste at transfer facilities and to curbside collection vehicles at the CHRLF. The minimum fee a customer would pay is equivalent to the prorated cost for the disposal of 320 pounds of waste material.
- **Regional Direct Fee.** A discounted fee charged to commercial collection companies that haul solid waste to Cedar Hills in transfer trailers from their own transfer stations and processing facilities, thus bypassing county transfer stations. This fee is set at 85 percent of the Basic Fee.
- **Special Waste Fee.** The fee charged for certain materials that require special handling, record keeping, or both, such as asbestos-containing materials and contaminated soil. This fee is set at 120 percent of the Basic Fee.
- **Yard Waste and Clean Wood Waste Fee.** A fee for separated yard waste and clean wood delivered to facilities that have separate collection areas for these materials. Appendix C provides a more detailed study of this rate.

Per-Item Fees

- **CFC Appliances.** Appliances with chlorofluorocarbons (CFCs,) such as refrigerators, are charged on a per-item basis.
- **Mattresses.** A per-item fee for mattresses is a new proposal. This will compensate King County for the high cost of handling these items and allow for the expansion of recycling services that handle them. Appendix C provides a more detailed study of this rate.
- **Unsecured Loads.** Vehicles that arrive at transfer stations with unsecured loads are charged a \$25 fee.

Cleanup LIFT

King County offers a discount on transactions for low-income self-haul customers, if they can provide an Orca LIFT, Electronic Benefit Transfer (EBT), or Medicaid card.

Other Revenue

Sale of Landfill Natural Gas

Landfill gas, a natural byproduct of the decomposition of waste at the CHRLF, is captured and converted to pipeline-quality natural gas by BioEnergy Washington (BEW). The natural gas is sold to Puget Sound

Energy and the revenue shared between BEW and the department. In addition, carbon credits, which are owned solely by the department, are sold to Puget Sound Energy, which brokers them on the secondary market. Energy markets are relatively volatile, so a conservative estimate is included in the rate model.

Rental Income

The Solid Waste Fund receives revenue from a variety of rental properties. The rent schedule from each lease is modelled, and properties that are near the end of their lease terms are re-evaluated for income potential.

Construction and Demolition Fee

The Solid Waste Fund collects a small fee from each ton of construction and demolition waste collected at third-party sorting and reclamation facilities. This revenue funds the Construction and Demolition Waste Program.

Moderate Risk Waste Reimbursement Expense

The Solid Waste Fund receives reimbursement income from the Hazardous Waste Management Program in exchange for providing Moderate Risk Waste (MRW) collection services. For example, DNRP Transfer Station Operators running an MRW facility at the Factoria Transfer Station.

Recyclable Materials Proceeds

Recycling collected at the transfer stations is sent to material-processing facilities, and the Solid Waste Fund pays for hauling costs and processing and then receives the commodity value of the processed material as revenue. After China implemented a policy that banned the importation of recyclable materials, values for many common materials fell precipitously. The proceeds from the sale of recyclable material are thus projected to be a declining revenue source.

Mattress Fee Analysis

Description of Proposed Mattress Fee

A \$30 per unit mattress handling charge at all County transfer stations and Cedar Hills waste clearances is proposed starting in 2022.^{1 2} This fee will help cover the costs of recycling these items from five major recycling and transfer stations (Bow Lake, Shoreline, Factoria, Enumclaw, and Vashon), and disposal at the other stations where there is no space to provide this service (Algona, Houghton, and Renton).

Background

DNRP has piloted mattress recycling at the Bow Lake Recycling and Transfer Station since mid-2017. During the pilot, customers paid the tipping fee³ (typically the minimum fee) and were allowed to recycle up to six mattresses per customer per day.

The [2019 King County Waste Characterization and Customer Survey Report](#) estimated there were 8,355 tons of mattresses disposed of at solid waste facilities that year. Recycling rather than disposing of mattresses aligns with the County's goal of zero waste of resources by 2030 by reducing the number of mattresses going to the landfill and increasing the recycling of steel, foam, wood, and fabrics.

This proposal positions King County to be an innovator in Washington State, as transfer station mattress recycling is an interim step toward state legislation establishing a more efficient and equitable statewide mattress product stewardship system. These mattress stewardship systems, generally referred to as Extended Producer Responsibility (EPR), are in place in California, Connecticut, and Rhode Island, and is under consideration in Oregon. A manufacturer-operated mattress EPR system would reimburse transfer station costs for mattress collection while providing a complete collection and recycling system.

Analysis

Based on costs from the Bow Lake pilot and adding indirect and overhead costs, the department estimates the cost to recycle one mattress is \$22. Several different pricing options were considered given this cost estimate:

¹ The definition of mattress also includes the foundation used to support a mattress (e.g., box spring).

² Some wastes may be accepted for disposal only when specific conditions are met. The process for evaluating restricted wastes, determining whether they can be accepted, and establishing the conditions for acceptance is known as waste clearance.

³ The tipping fee, or "Basic Fee" is the per-ton fee charged to customers disposing of municipal solid waste at transfer facilities and to curbside collection vehicles at the CHRLF. The "minimum fee" a customer would pay is equivalent to the prorated cost for the disposal of 320 pounds of waste material.

Option	Description	Price
Status Quo	Treat mattresses as garbage and typically charge the minimum fee, as mattresses weigh 55 pounds on average and the minimum fee is set at 320 pounds. Note: A customer will usually bring in at least two units – the mattress and the foundation – so from a per-unit standpoint, the price is significantly lower than the per-transaction price they are charged.	~\$27 per transaction, not per unit
Cost Recovery	Based on analysis above, charge a price to fully recover costs.	\$22 per unit
Match Private Sector	Based on analysis of 2019 pricing, customers pay private sector mattress recyclers \$20 to \$29 per unit.	\$30 per unit

Decision

It was determined to set the price at the high end of private-sector pricing in order to not take customers away from businesses that charge this price, while offering the service at King County stations as an option. It is expected that private sector pricing will increase from the 2019 rates shown above.

Some of the County's transfer stations currently have the ability to recycle mattresses while others do not. The decision to charge \$30 per unit for both recycling and disposal of mattresses was made to encourage recycling of mattresses and discourage customers from going to a station that only disposes of mattresses at a lower price. As noted above, if a customer brought in the maximum six mattresses on the visit to a King County station that disposes of mattresses, and the same fee for disposal as for recycling was not charged, the customer would be charged the \$27 the minimum fee instead of the \$180 ($\$30/\text{unit} \times 6 \text{ units} = \180 total price) at a station that recycles them. This is a significant of savings that could encourage customers to dispose of rather than recycle their mattresses. Mattresses take up significant air space at the landfill, so reducing the number of mattresses going to the landfill will preserve airspace and benefit rate payers.

Note that disposing of mattresses at Cedar Hills as part of a waste clearance will be charged on a per-ton basis at \$1,090 per ton versus the \$175.08 per ton Special Waste Clearance Fee paid now, incentivizing recycling options. This price is set by dividing 2,000 pounds (1 ton) by 55 pounds (average weight of a mattress) times \$30 per mattress. A typical customer bringing mattresses directly to the landfill is a bed supplier disposing of old or used mattresses; and taking the time to count dozens or scores of mattresses on a truck is onerous for both the customer and the King County.

Solid Waste Yard / Wood Waste Fee Increase Analysis

Description of the Yard / Wood Waste Fee Increase

An increase the current yard / wood waste fee from \$75 per ton to \$100 per ton is proposed for 2022. The minimum fee would increase from \$12 per entry to \$16 per vehicle entry.

Background

The Solid Waste yard / wood waste fee has remained at \$75 per ton since 2013. According to 2019 and 2020 data, collecting and recycling yard / wood waste cost the County \$300,000 more each year than the revenues generated from the tip fees. King County is moving toward charging fees that recover the cost of providing the service.

Analysis

Several different pricing options for increasing the yard /wood waste fee were considered:

Option	Description	Price
Status Quo	Continue to charge current fees.	\$75 per ton, \$12 min fee
Inflation Adjusted	Increase the fee by adjusting the current \$75 per ton to account for inflation since 2013, based on the Seattle-area Consumer Price Index	\$90 per ton, \$14 min fee
Cost Recovery	Set price based on cost-recovery analysis. <i>NOTE: Analysis shows it costs DNRP \$115 per ton but DNRP set the price lower to avoid a dramatic increase in the fee.</i>	\$100 per ton, \$16 min fee
Seattle Rates	Set price equal to neighboring major solid waste system.	\$113 per ton, \$21 min fee (as of Apr 1, 2020)

Conclusion

The increased price is based on cost-recovery analysis conducted by DNRP. As noted above, the analysis shows it costs the County \$115 per ton to recycle yard /wood waste and the proposal is to set the price at \$100 per ton. Feedback from advisory committees suggested that going higher than \$100 per ton was too much of an increase, particularly during recovery from the pandemic. This is an interim step toward eventual full-cost recovery pricing.

Solid Waste Tonnage Forecast Through 2026

The solid waste rate proposal was developed using a forecast of the amount of waste that will be disposed of at department facilities during the rate period. The forecast relies on established statistical relationships between waste being disposed of and economic and demographic variables that affect it, including population, employment, and consumption.¹

Year	Type	Basic Fee Tons	Regional Direct	Special Waste	Total Tons Disposed	Yard/ Wood Waste	Total System Tons
2015	Actual	861,620	6,384	1,797	869,802	11,723	881,525
2016	Actual	910,803	8,894	2,303	922,000	16,168	938,168
2017	Actual	915,570	12,161	3,446	931,177	21,966	953,143
2018	Actual	867,842	17,039	3,632	888,513	19,150	907,663
2019	Actual	858,300	7,542	2,690	868,532	22,739	891,271
2020	Actual	835,092	32,553	1,504	869,149	23,583	892,732
2021	Forecast	855,226	18,300	1,500	875,026	25,000	900,026
2022	Forecast	869,700	18,300	1,500	889,500	25,700	915,200
2023	Forecast	882,099	18,300	1,500	901,899	28,000	929,899
2024	Forecast	885,339	18,300	1,500	905,139	28,000	933,139
2025	Forecast	888,579	18,300	1,500	908,379	30,000	938,379
2026	Forecast	889,265	18,300	1,500	909,065	30,000	939,065

¹ Consumption measured in dollars spent for retail sales, excluding automobiles.

Summary of Solid Waste Rate Model Through 2026

	Actuals		Projected					
	2019	2020	2021	2022	2023	2024	2025	2026
Basic Fee	\$140.82	\$140.82	\$140.82	\$154.02	\$168.45	\$184.24	\$201.50	\$219.89
Percent change	4.6%	0.0%	0.0%	9.4%	9.4%	9.4%	9.4%	9.1%
REVENUES								
Disposal Fees	\$126,852,447	\$127,849,788	\$125,039,225	\$139,771,179	\$155,306,239	\$170,147,062	\$186,770,300	\$203,577,670
Landfill Gas	\$3,438,249	\$3,069,083	\$2,150,000	\$2,150,000	\$2,150,000	\$2,150,000	\$2,150,000	\$2,150,000
Other Revenues*	\$8,415,537	\$13,482,761	\$26,690,556	\$10,706,013	\$11,912,939	\$12,138,111	\$12,381,967	\$12,655,598
Total Revenues	\$138,706,233	\$144,401,633	\$153,879,781	\$152,627,193	\$169,369,178	\$184,435,173	\$201,302,266	\$218,383,268
EXPENDITURES								
SWD Operating Expenditures	\$104,630,952	\$106,112,191	\$121,650,019	\$117,518,631	\$126,881,163	\$132,669,562	\$146,568,171	\$151,057,776
Landfill Reserve Fund	\$15,182,103	\$16,907,862	\$12,381,966	\$12,970,790	\$13,811,428	\$13,056,808	\$12,411,964	\$11,866,757
Capital Equipment Recovery Program	\$6,900,000	\$6,900,000	\$3,373,524	\$3,373,524	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000
Construction Fund	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Debt Service	\$13,859,197	\$13,421,125	\$13,710,477	\$16,201,918	\$22,480,989	\$31,461,346	\$38,806,049	\$44,933,226
Total Expenditures	\$142,572,252	\$145,341,178	\$153,115,985	\$152,064,863	\$173,173,580	\$187,187,716	\$207,786,185	\$217,857,760
RESERVES								
Rainy Day Reserve	\$9,643,132	\$9,643,132	\$10,957,540	\$10,822,750	\$12,276,341	\$13,490,212	\$15,236,237	\$16,108,850
Recession Reserve	\$6,342,622	\$0	\$0	\$0	\$2,484,900	\$5,444,706	\$8,964,974	\$13,028,971

* Large increase in 2021 is due to the upcoming sale of surplus property (Eastgate) which will be a one-time revenue.

Certificate Of Completion

Envelope Id: B57A3429BADC4BE3AF00C7B99DF2490A	Status: Completed
Subject: Please DocuSign: Ordinance 19329.docx, Ordinance 19329 Attachment A.pdf	
Source Envelope:	
Document Pages: 28	Signatures: 3
Supplemental Document Pages: 35	Initials: 0
Certificate Pages: 5	Envelope Originator:
AutoNav: Enabled	Cherie Camp
Enveloped Stamping: Enabled	401 5th Ave
Time Zone: (UTC-08:00) Pacific Time (US & Canada)	Suite 100
	Seattle, WA 98104
	Cherie.Camp@kingcounty.gov
	IP Address: 198.49.222.20

Record Tracking

Status: Original	Holder: Cherie Camp	Location: DocuSign
9/8/2021 2:21:08 PM	Cherie.Camp@kingcounty.gov	
Security Appliance Status: Connected	Pool: FedRamp	
Storage Appliance Status: Connected	Pool: King County General (ITD)	Location: DocuSign

Signer Events

Claudia Balducci
 claudia.balducci@kingcounty.gov
 King County General (ITD)
 Security Level: Email, Account Authentication (None)

Signature

DocuSigned by:

 7E1C273CE9994B6...
 Signature Adoption: Pre-selected Style
 Using IP Address: 198.49.222.20

Timestamp

Sent: 9/8/2021 2:22:59 PM
 Viewed: 9/13/2021 11:24:09 AM
 Signed: 9/13/2021 11:25:02 AM

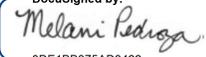
Electronic Record and Signature Disclosure:

Not Offered via DocuSign
 Supplemental Documents:

Ordinance 19329 Attachment A.pdf

Viewed: 9/13/2021 11:24:16 AM
 Read: Not Required
 Accepted: Not Required

Melani Pedroza
 melani.pedroza@kingcounty.gov
 Clerk of the Council
 King County Council
 Security Level: Email, Account Authentication (None)

DocuSigned by:

 8DE1BB375AD3422...
 Signature Adoption: Uploaded Signature Image
 Using IP Address: 198.49.222.20

Sent: 9/13/2021 11:25:04 AM
 Viewed: 9/13/2021 11:48:47 AM
 Signed: 9/13/2021 11:49:01 AM

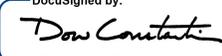
Electronic Record and Signature Disclosure:

Not Offered via DocuSign
 Supplemental Documents:

Ordinance 19329 Attachment A.pdf

Viewed: 9/13/2021 11:48:55 AM
 Read: Not Required
 Accepted: Not Required

Dow Constantine
 Dow.Constantine@kingcounty.gov
 Security Level: Email, Account Authentication (None)

DocuSigned by:

 4FBCAB8196AE4C6...
 Signature Adoption: Uploaded Signature Image
 Using IP Address: 198.49.222.20

Sent: 9/13/2021 11:49:04 AM
 Viewed: 9/21/2021 5:08:52 PM
 Signed: 9/21/2021 5:09:14 PM

Electronic Record and Signature Disclosure:

Accepted: 9/21/2021 5:08:52 PM
 ID: 94db8ede-f69c-46c8-90f0-f0a3fdf8ff66
 Supplemental Documents:

Ordinance 19329 Attachment A.pdf

Viewed: 9/21/2021 5:09:09 PM
 Read: Not Required

Signer Events	Signature	Timestamp
---------------	-----------	-----------

Accepted: Not Required

In Person Signer Events	Signature	Timestamp
-------------------------	-----------	-----------

Editor Delivery Events	Status	Timestamp
------------------------	--------	-----------

Agent Delivery Events	Status	Timestamp
-----------------------	--------	-----------

Intermediary Delivery Events	Status	Timestamp
------------------------------	--------	-----------

Certified Delivery Events	Status	Timestamp
---------------------------	--------	-----------

Carbon Copy Events	Status	Timestamp
--------------------	--------	-----------

Kaitlyn Wiggins

kwwiggins@kingcounty.gov

Security Level: Email, Account Authentication
(None)

Electronic Record and Signature Disclosure:
Not Offered via DocuSign

COPIED

Sent: 9/13/2021 11:49:05 AM

Viewed: 9/13/2021 12:17:10 PM

Witness Events	Signature	Timestamp
----------------	-----------	-----------

Notary Events	Signature	Timestamp
---------------	-----------	-----------

Envelope Summary Events	Status	Timestamps
-------------------------	--------	------------

Envelope Sent

Hashed/Encrypted

9/8/2021 2:22:59 PM

Certified Delivered

Security Checked

9/21/2021 5:08:52 PM

Signing Complete

Security Checked

9/21/2021 5:09:14 PM

Completed

Security Checked

9/21/2021 5:09:14 PM

Payment Events	Status	Timestamps
----------------	--------	------------

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, Carahsoft OBO King County ITD (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign, Inc. (DocuSign) electronic signing system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to these terms and conditions, please confirm your agreement by clicking the 'I agree' button at the bottom of this document.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after signing session and, if you elect to create a DocuSign signer account, you may access them for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. To indicate to us that you are changing your mind, you must withdraw your consent using the DocuSign 'Withdraw Consent' form on the signing page of a DocuSign envelope instead of signing it. This will indicate to us that you have withdrawn your consent to receive required notices and disclosures electronically from us and you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Carahsoft OBO King County ITD:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: bob.johnson@kingcounty.gov

To advise Carahsoft OBO King County ITD of your new e-mail address

To let us know of a change in your e-mail address where we should send notices and disclosures electronically to you, you must send an email message to us at bob.johnson@kingcounty.gov and in the body of such request you must state: your previous e-mail address, your new e-mail address. We do not require any other information from you to change your email address..

In addition, you must notify DocuSign, Inc. to arrange for your new email address to be reflected in your DocuSign account by following the process for changing e-mail in the DocuSign system.

To request paper copies from Carahsoft OBO King County ITD

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an e-mail to bob.johnson@kingcounty.gov and in the body of such request you must state your e-mail address, full name, US Postal address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with Carahsoft OBO King County ITD

To inform us that you no longer want to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your DocuSign session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an e-mail to bob.johnson@kingcounty.gov and in the body of such request you must state your e-mail, full name, US Postal Address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

Operating Systems:	Windows® 2000, Windows® XP, Windows Vista®; Mac OS® X
Browsers:	Final release versions of Internet Explorer® 6.0 or above (Windows only); Mozilla Firefox 2.0 or above (Windows and Mac); Safari™ 3.0 or above (Mac only)
PDF Reader:	Acrobat® or similar software may be required to view and print PDF files
Screen Resolution:	800 x 600 minimum

Enabled Security Settings:	Allow per session cookies
----------------------------	---------------------------

** These minimum requirements are subject to change. If these requirements change, you will be asked to re-accept the disclosure. Pre-release (e.g. beta) versions of operating systems and browsers are not supported.

Acknowledging your access and consent to receive materials electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please verify that you were able to read this electronic disclosure and that you also were able to print on paper or electronically save this page for your future reference and access or that you were able to e-mail this disclosure and consent to an address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format on the terms and conditions described above, please let us know by clicking the 'I agree' button below.

By checking the 'I agree' box, I confirm that:

- I can access and read this Electronic CONSENT TO ELECTRONIC RECEIPT OF ELECTRONIC RECORD AND SIGNATURE DISCLOSURES document; and
- I can print on paper the disclosure or save or send the disclosure to a place where I can print it, for future reference and access; and
- Until or unless I notify Carahsoft OBO King County ITD as described above, I consent to receive from exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to me by Carahsoft OBO King County ITD during the course of my relationship with you.