

Request for Certificate of Need Pine Bend Landfill, SW-45

Prepared for:

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1.0 Summary

On July 22, 2020, the Minnesota Pollution Control Agency (MPCA) issued a Notice of Intent to Accept Certificate of Need Requests. This document fulfills the requirements of a CON request for the Pine Bend Landfill (PBL).

BFI Waste Systems of North America, LLC (BFI) owns and operates PBL, located in Inver Grove Heights, Dakota County, Minnesota. In August 2015, PBL applied to MPCA for a Request of Major Modification of permit SW-45. The permit was modified on May 31, 2019. The major modification detailed an airspace capacity expansion over the existing landfill footprint by developing and permitting 3:1 final cover slopes around the entire existing landfill footprint, including the north and east sides. The landfill is currently permitted with 3:1 cover slopes on the south and west sides. The Project increased the permitted capacity by approximately 4,137,400 cubic yards (cy) of airspace, from 29,800,000 cy to 33,937,400 cy. It is important to note that no footprint increase or increase to the currently permitted peak elevation of the landfill was proposed as part of this major modification request. In April 2018, PBL submitted the additional information requested as referenced in Minn. Stat. § 473.823, subd. 3 (a) and Appendix D of the State Metro Policy Plan with the application for modification and reissuance of MPCA Solid Waste Permit SW-45. The Draft Permit was published for Public Notice on March 21, 2019, with a 30-day comment period ending April 19, 2019. In August 2017, application was made to the City of Inver Grove Heights requesting amendments and approvals from the City for the following:

- ▲ Zoning Ordinance amendment
- ▲ Conditional Use Permit (CUP) amendment
- ▲ Non-Conforming Use Certificate (NCUC) amendment

The above amendments were granted by the City on April 9, 2018. A license for the proposed airspace capacity was also issued to PBL by Dakota County in April 2018.

PBL was most recently granted CON in on April 30, 2002 as part of the Phase 5 vertical expansion of the facility which increased the total facility disposal capacity to 29,800,000 cy. In order to continue to serve surrounding communities and dispose of mixed municipal solid waste (MSW), BFI requests 4,000,000 tons of additional CON for MSW disposal be granted to PBL for the next 10 year period.

1.1 PURPOSE

The Waste Management Act (MN Statute 473.823, subd. 6) states that no new land disposal capacity for MSW shall be permitted in the Twin Cities Metropolitan Area (TCMA) without a Certification of Need (CON) issued by the MPCA indicating that the additional disposal capacity is needed. The *Metropolitan Solid Waste Management Policy Plan 2016-2036* (Policy Plan) includes standards and procedures for certifying need based on the metropolitan disposal abatement plan adopted pursuant to MN Statutes 473.149, subd. 2d, and the solid waste disposal facilities development schedule adopted under MN Statutes 473.149, subd. 2e. The Commissioner shall certify need only to the extent that there are no feasible and prudent alternatives to the disposal facility. Alternatives that are speculative or conjectural shall not be deemed to be feasible and prudent. Economic considerations alone shall not justify the certification of need nor the rejection of alternatives.

This report contains information described in Minnesota Rule §9215.0900, Content of the Certificate of Need Request. This includes:

- ▲ Annual solid waste estimates of the amount and type of solid waste to be managed annually at the Facility during its design life.
- ▲ Origin of waste, including estimates of the amount of solid waste received from each county. Information about counties outside the metropolitan area shall be based on information in approved county solid waste management plans.
- ▲ If the amount of new capacity needed is greater than the amount identified in the approved plan due to erroneous assumptions concerning the amount of solid waste generated, the application will document the basis for calculating the amount of capacity needed in lieu of an analysis of alternatives.

1.2 APPLICABLE STATUTES AND RULES

Various Minnesota Statutes and Rules apply to the process of expanding capacity at an MSW landfill within the Twin Cities Metropolitan Area (TCMA). They are listed below.

1.2.1 Minn. Stat. 115A.02 Legislative Declaration of Policy; Purposes

According to Minn. Stat. §115A.02(a)(5), it is the goal of the chapter to protect the state's land, air, water, and other natural resources and the public health by improving waste management to serve the orderly and deliberate development and financial security of waste facilities including disposal facilities.

1.2.2 Minn. Stat. 473.823 Rules and Permits

Subd. 3. Solid waste facilities; review procedures.

(a) The agency shall request applicants for solid waste facility permits to submit all information deemed relevant by the Commissioner for review, including without limitation information relating to the geographic areas and population served, the need, the effect on existing facilities and services, the effectiveness of proposed buffer areas to ensure, at a minimum, protection of surrounding land uses from adverse or incompatible impacts due to landfill operation and related activities, the anticipated public cost and benefit, the anticipated rates and charges, the manner of financing, the effect on metropolitan plans and development programs, the supply of waste, anticipated markets for any product, and alternative means of disposal or energy production.

(b) A permit may not be issued for the operation of a solid waste facility in the metropolitan area which is not in accordance with the metropolitan policy plan. The Commissioner shall determine whether a permit is in accordance with the policy plan. In making this determination, the Commissioner shall consider the areawide need and benefit of the applicant facility and the effectiveness of proposed buffer areas to adequately protect surrounding land uses in accordance with the policy plan, and may consider, without limitation, the effect of the applicant facility on existing and planned solid waste facilities.

(c) If the Commissioner determines that a permit is in accordance with the policy plan, the Commissioner shall approve the permit. If the Commissioner determines that a permit is not in accordance with the policy plan, the Commissioner shall disapprove the permit. Approval of permits may be subject to conditions the Commissioner determines are necessary to satisfy criteria and standards in the policy plan, including conditions respecting the type, character, and quantities of waste to be processed at a solid waste facility used primarily for

resource recovery and the geographic territory from which a resource recovery facility or transfer station serving such a facility may draw its waste.

(d) A permit may not be issued in the metropolitan area for a solid waste facility used primarily for resource recovery or a transfer station serving the facility, if the facility or station is owned or operated by a public agency or if the acquisition or betterment of the facility or station is secured by public funds or obligations issued by a public agency, unless the Commissioner finds and determines that adequate markets exist for the products recovered and that establishment of the facility is consistent with the criteria and standards in the metropolitan and county plans respecting the protection of existing resource recovery facilities and transfer stations serving such facilities.

Subd. 6. Certification of Need

No new mixed municipal solid waste disposal facility or capacity shall be permitted in the metropolitan area without a certificate of need issued by the Commissioner indicating a determination that the additional disposal capacity planned for the facility is needed in the metropolitan area. The Commissioner shall amend the policy plan, adopted pursuant to section [473.149](#), to include standards and procedures for certifying need that conform to the certification standards stated in this subdivision. The standards and procedures shall be based on the metropolitan disposal abatement plan adopted pursuant to section [473.149, subdivision 2d](#), the solid waste disposal facilities development schedule adopted under section [473.149, subdivision 2e](#), and the provisions of any master plans of counties that have been approved under section [473.803, subdivision 2](#), and that are consistent with the abatement plan and development schedule. The Commissioner shall certify need only to the extent that there are no feasible and prudent alternatives to the disposal facility, including waste reduction, source separation and resource recovery which would minimize adverse impact upon natural resources. Alternatives that are speculative or conjectural shall not be deemed to be feasible and prudent. Economic considerations alone shall not justify the certification of need or the rejection of alternatives.

1.2.3 Minn. Stat. 473.149: Solid waste comprehensive planning

Subd. 2d: Land disposal abatement plan.

(a) The Commissioner shall include in the policy plan specific and quantifiable metropolitan objectives for abating to the greatest feasible and prudent extent the need for and practice of land disposal of mixed municipal solid waste and of specific components of the solid waste stream, including residuals and ash, either by type of waste or class of generator.

(b) The objectives must be stated in six-year increments for a period of at least 20 years from the date of adoption of policy plan revisions. The plan must include a reduced estimate of the capacity, based on the abatement objectives, needed for the disposal of various types of waste in each six-year increment.

(c) The plan must include objectives for waste reduction and measurable objectives for local abatement of solid waste through resource recovery, recycling, and source separation programs for each metropolitan county stated in six-year increments for a period of at least 20 years from the date of adoption of policy plan revisions.

(d) The standards must be based upon and implement the metropolitan abatement objectives. The plan must include standards and procedures to be used by the

Commissioner in determining whether a metropolitan county has implemented the metropolitan land disposal abatement plan and has achieved the objectives for local abatement.

Subd. 2e. Disposal capacity needs.

After requesting and considering recommendations from the counties, cities, and towns, the Commissioner as part of the policy plan shall determine the capacity needed to serve the metropolitan area for disposal of solid waste, including residuals and ash, in six-year increments for a period of at least 20 years from adoption of policy plan revisions. In making the capacity determination, the Commissioner must take into account the reduced estimate of disposal capacity needed because of the land disposal abatement plan.

The Commissioner's determination must include standards and procedures for certification of need pursuant to section [473.823](#).

1.2.4 Minn Rules 7035.0350 Solid Waste Management Hierarchy

The Minnesota Solid Waste Management Hierarchy intends to foster an integrated solid waste management system to protect the state's land, air, water, and other natural resources as well as public health. The hierarchy emphasizes reducing toxicity and volume of wastes and using wastes for their highest and best value.

MPCA has interpreted this rule to prefer, in order, reduction of waste, reuse, recycling, composting, waste-to-energy, landfilling with energy recovery, and landfill disposal without energy recovery.

1.2.5 Minn Rules 9215.0900 Content of Certificate of Need Request

Subpart 1. Scope. The certificate of need request shall contain the information described in this part.

Subp. 2. Annual solid waste estimates.

The request shall include estimates of the amount and type of solid waste to be managed annually at the facility during its design life.

Subp. 3. Origin of waste.

The request shall include identification of the origin of the solid waste including estimates of the amount of solid waste to be received annually from each county or district of origin. Information about quantities of solid waste from counties or districts outside the metropolitan area shall be based on information in approved county solid waste management plans. Information about quantities of solid waste from counties or districts within the metropolitan area shall be based on information in approved county or district solid waste master plans. If an approved county or district solid waste management plan or master plan does not state that solid waste from a county or district will be managed at the proposed facility, the request shall include a letter from the county or district board of the county or district generating the solid waste indicating that in the county's or district's best estimate the amount of solid waste in question is available for management at the proposed facility. The letter must be consistent with the approved plan and the plan amendment requirements of part §9215.0810.

Subp. 4. Alternatives.

The request shall include an analysis of alternatives to the new or expanded disposal capacity if the new capacity has not been included in the approved county solid waste management plan or county master plan.

Subp. 5. Estimate errors.

If the amount of new capacity needed is greater than the amount identified in the approved plan due to erroneous assumptions concerning the amount of solid waste generated, the application must document the basis for calculating the amount of capacity needed in lieu of an analysis of alternatives.

1.2.6 Summary of PBL References in Restriction on Disposal Report

MPCA published the *Report to the Legislature: Metropolitan Waste Disposal Restrictions* report (ROD Report) in October 2012. Included are the MMSW tons received in 2011 (273,766 tons) and a description of the landfill:

The Pine Bend Landfill is located in Inver Grove Heights (Dakota County). Over the past three years more than 90 percent of the MMSW disposed at the facility was metropolitan area unprocessed waste. It is owned by a subsidiary of Allied Waste. The landfill produces landfill gas. In 2011, according to the facility annual report, almost 100 percent of the collected landfill gas was incinerated in an engine. Landfill gas will be generated by the waste already in place for decades into the future. The landfill pays voluntary "host fees" to the City of Inver Grove Heights and Dakota County that support various public service programs in those areas. The county fee has both a fixed and volume based component. The county is currently renegotiating its fee agreement. The landfill may have the capacity to accept an additional four million tons of waste. This would mean that the landfill could function for decades assuming moderate progress is made in achieving the Policy Plan's objectives.

Pine Bend is located near the Newport RRT resource recovery facility and is the nearest landfill to the City of Red Wing resource recovery facility. Processible MMSW that is delivered to these resource recovery facilities would likely be relatively small because these facilities have a reasonably small available capacity. Therefore, MPCA would estimate a moderate (10 percent) decrease in waste flow to the Pine Bend Landfill.

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The ROD Report shows a graph of Metropolitan MMSW to MN Landfills 2004-2010 on Page 13. The graph shows how waste increased from 2004-2006 from 160,000 tons to 300,000 tons per year from 2004-2006, then decreased to 170,000 tons in 2008 before rebounding back to 300,000 tons in 2010.

1.3 SUMMARY OF POLICY PLAN

The Policy Plan was adopted by MPCA Commissioner John Linc Stine on April 6, 2017. It affects the Twin Cities Metropolitan Area (TCMA), which includes Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties but not the cities of Northfield, Hanover, Rockford, and New Prague. The Policy Plan is intended to guide the MPCA's approval of solid waste facility permits and landfill certificates of need¹.

¹ "How the Plan will be used by stakeholders," Page 3

A chart of historical MSW management in TCMA shows that as of 2015, 23% of all MSW was managed in landfills while 40% was recycled, 27% went to Waste to Energy (WTE) facilities, and 10% was organics management.

Objectives going forward are aggressive in reducing the amount of waste managed at landfills, as shown in Table 1-1.

Table 1-1: Metro Policy Plan Waste Management Objectives 2015-2036

Management Method	2015: Current System	2020	2025	2030	2036
Source Reduction and Reuse		1.5%	3%	4%	5%
Recycling	39%	51%	54%	60%	60%
Organics Recovery	10%	12%	14%	15%	15%
Resource Recovery	28%	35%	31%	24%	24%
Landfilling	23%	2%	1%	1%	1%

Appendix D lists procedures for obtaining MPCA CON for landfills in the Metropolitan Area. "MPCA will notify MMSW landfills located in the Metropolitan Area of MPCA's intent to accept CON requests for additional MMSW land disposal capacity after the adoption of the Plan and after MPCA approval of all county master plans." On July 22, 2020, MPCA issued the notice "because resource recovery facilities operated at full capacity in the first quarter of 2020 and the seven metro counties certified disposed waste as unprocessable." In the notice, MPCA notes that if the criteria are no longer met during the 180 day period in which CON requests must be received, MPCA will suspend the CON process.

As of drafting of this request, the Policy Plan and all TCMA county master plans have been adopted. Submitting a CON request at this time is in line with BFI's business objectives and the orderly development of PBL.

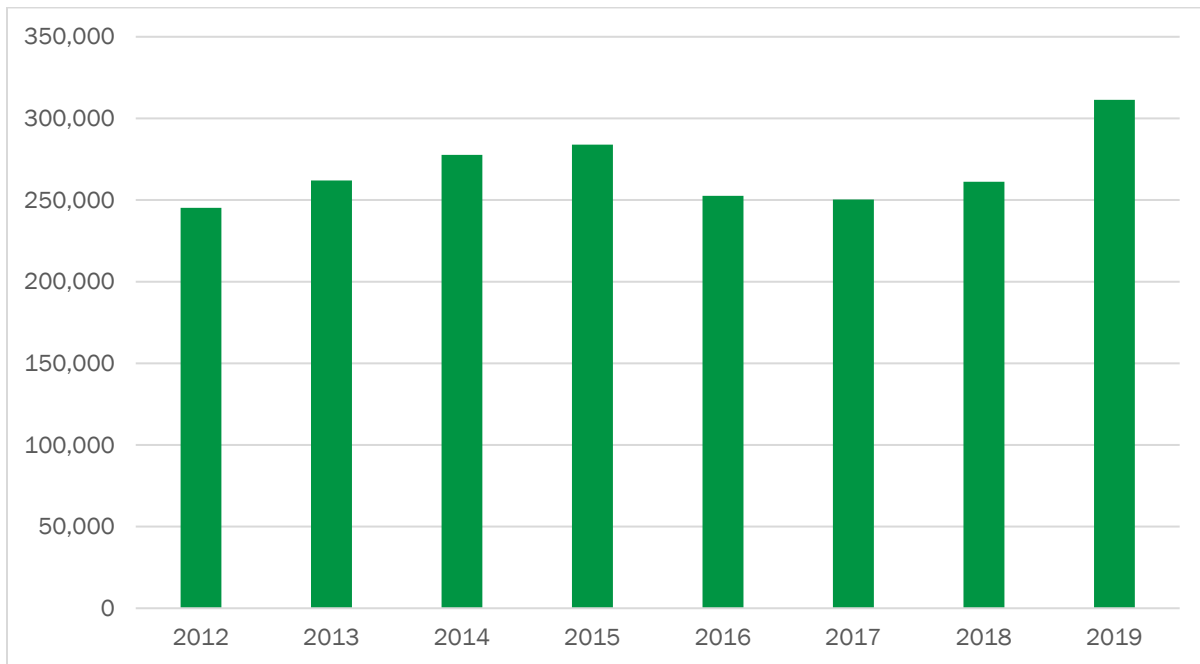
MPCA will apply the following criteria to determine whether CON can be granted:

- ▲ Restriction on Disposal -- MPCA will not accept or review any request for additional land disposal capacity unless MSW resource recovery facilities are functioning at full capacity and waste has been certified as unprocessable by metro counties.
- ▲ Orderly and deliberate development of facilities: pursuant to Minn. Stat. §115A.02, the MPCA must ensure the orderly and deliberate development of facilities, including landfills. MPCA will not grant all CON to one landfill to avoid a situation where the metro area is dependent on the services of a single disposal facility.

2.0 Annual Solid Waste Estimates

Data from the Facility and Landfill Annual Report Data show a consistency in the amount of MSW received at PBL. From 2012-2019, the amount is between 245,000-312,000 tons of MSW as shown in the figure below. The increase in disposal in 2019 is likely attributable to the closing of GRE and the increase in need for disposal capacity.

Figure 2-1: MSW Disposal at Pine Bend Landfill 2012-2019



Hennepin, Dakota, and Ramsey counties account for approximately 70% of the waste disposed of at PBL. If the total MSW increased with population in these three counties, and the landfilled percentage matched that reported in the 2018 SCORE report, these three counties would be estimated to have landfilled 785,000 tons of MSW in 2020. Assuming these three counties send half their waste to PBL and accounting for the population-driven increase in MSW over the next ten years, PBL anticipates receiving 400,000 tons of MSW per year.

As the TCMA Counties enact the latest Policy Plan and work towards the recycling, organics collection, resource recovery, and landfill management, the future annual average solid waste estimate for PBL is 400,000 tons per year. PBL is requesting CON for 400,000 tons per year, or 4 million tons for the next 10 years.

Presently, PBL accepts MSW, bypass MSW from resource recovery facilities, process residuals, non-hazardous industrial waste and some materials for alternative daily cover (ADC). CON is needed for disposal of unprocessed MSW.

3.0 Origin of Waste

3.1 GENERAL INFORMATION

The majority of the MSW that PBL receives is from the TCMA. The following table shows the amount of MSW collected from each TCMA county from 2016 - 2019.

Table 3-1: MSW Collected in the PBL Wasteshed

County	2016 MSW (tons)	2017 MSW (tons)	2018 MSW (tons)	2019 MSW (tons)
Anoka	13,061	12,085	10,996	32,700
Carver	10,844	10,170	9,672	10,777
Dakota	44,115	47,205	70,318	87,723
Hennepin	108,391	98,033	93,549	95,363
Ramsey	29,476	28,384	29,159	33,631
Scott	22,724	24,175	14,631	11,600
Washington	5,043	5,192	1,930	1,035
Other - MN	18,504	24,651	30,500	38,466
Other - Out of state	431	436	496	109
Total	252,588	250,330	261,250	311,403

Note: The 2018 MSW from Ramsey County includes 25,289 tons of bypass MSW from REC and the 2019 Ramsey County data includes 29,998 tons of bypass MSW from REC

The Metropolitan Council estimated the 2019 population of TCMA at 3,152,564 and the Minnesota State Demographic Center has estimated a population in 2030 of 3,448,741 residents. Given the increase in population expected in the TCMA, the operational history of PBL in the area, and the proximity of PBL to the TCMA waste shed, PBL will continue to be an option for solid waste management in the area. The majority of the Other – MN waste listed in the table is from Benton and Sherburne Counties from the Minden Transfer Station. See attached Figure 1 for the location of PBL. Attached Figure 2 shows the TCMA counties and their current and projected populations. In general, MSW generation increases as population increases. Total MSW generation can also follow economic strength as seen when the per capita MSW generation decreased during the recession of 2008. In looking to the future, MSW generation is expected to rise with population increase, though per capita generation may fluctuate. The Policy Plan includes goals for source reduction which may be tracked via per capita MSW generation rates.

3.2 POLICY PLAN, MASTER PLANS, AND SOLID WASTE MANAGEMENT PLANS

PBL has been accepting waste in Inver Grove Heights for nearly 50 years. It is well established in the community as a waste management facility. As shown above, it collects waste from all seven TCMA counties and is expected to continue to do so, especially for waste that cannot be productively utilized for materials or energy recovery. Granting CON to PBL would fulfill the criterion for orderly and deliberate development of landfills in accordance with Minn. Stat. 115A.02(a)(5).

3.2.1 Metro Policy Plan Goals

The Policy Plan established MSW management system objectives for source reduction and reuse, recycling, organics recovery, resource recovery, and maximum landfill management. Table 1a from the Policy Plan with the objectives is reproduced in Section 1.3.

The Policy Plan also provides the objectives in terms of tons of MSW managed based on projections and the percentages from Table 1-1. These are reproduced in Table 3-2.

Table 3-2: MSW Management Goals 2015-2036, thousands tpy

Management Method	2015: Current System	2020	2025	2030	2036
Source Reduction and Reuse	0	55	119	171	232
Recycling	1,324	1,844	2,081	2,463	2,644
Organics Recovery	342	434	540	616	661
Resource Recovery	931	1,271	1,184	985	1,058
Landfilling	768	67	49	41	44
Total Tons Generated	3,365	3,615	3,854	4,105	4,407

These goals are very aggressive, especially in terms of recycling and organics collection. The landfilling objectives are presented as ceiling values to represent that maximum amount landfilled while meeting the rest of the Policy Plan goals. With the closing of the Great River Energy (GRE) processing facility in Elk River, the capacity for resource recovery of TCMA waste has decreased by 320,000 tons per year. It is prudent to consider that the goals may not be met, especially in light of the closing of the GRE, and to ensure that there are proper disposal options available in the State of Minnesota.

3.3 MASTER PLANS

The seven TCMA counties have written and approved County Solid Waste Master Plans (Master Plans). These Master Plans are required by Minnesota Statute 873.803 to support the objectives in the Policy Plan and the legislated goals for recycling and organics management. Unlike county Solid Waste Management Plans (SWMPs) in Greater Minnesota, Master Plans do not need to tabulate expected MSW generation and management including the final destination for county waste and can instead repeat the Policy Plan objectives. Since the final destination for waste is not required to be specified in the Master Plans, some

of the TCMA County master plans do not explicitly name PBL as a final destination option, though all seven TCMA counties do currently utilize PBL for MSW disposal. Therefore, it is assumed that since PBL is included in the Policy Plan and the TCMA county MSW is disposed of at PBL, MSW from the TCMA is and will continue to be available for disposal at PBL.

3.3.1 County Solid Waste Master Plan

The county master plans for the TCMA are similar in their stated objectives and are unique to each county in the methods and programs initiated to meet the goals. As an example, citations from the Anoka County Master Plan are provided in this section. The Anoka County Master Plan includes a Contingency Plan in the event the program objectives are not met. As evidenced by past Policy Plan objectives, legislative goals for recycling and organics, and solid waste management trends in Minnesota, it is prudent to maintain landfill capacity at established landfills like PBL to manage solid waste effectively.

The following table shows an example of the tonnage and percentages that Anoka County would need to meet through 2036 to meet the Policy Plan objectives, including source reduction, recycling, landfill, and resource recovery objectives.

Table 3-3: Anoka County MSW Management Objectives

Year	Projected Population	Recycling (tpy)		Landfill (tpy)		RRF (tpy)		Total MSW (tpy)	Per Capita MSW Generation Rate (tpy/person)
2016	347,503	212,166	51%	94,981	23%	106,367	26%	413,514	1.19
2020	358,469	276,369	63%	8,774	2%	153,538	35%	438,681	1.22
2025	370,460	303,596	68%	4,465	1%	138,404	31%	446,465	1.21
2030	380,651	340,513	75%	4,540	1%	108,964	24%	454,017	1.19
2036	391,532	381,963	83%	5,093	1%	122,228	26%	462,130	1.18

With respect to landfills, Anoka County emphasizes the benefit of conserving existing landfill space given the difficulties with siting and permitting new landfills. Other Master Plans and documents such as the *Metropolitan Waste Disposal Restriction Report to the Legislature* acknowledge that PBL is likely to be operating in the coming decades to serve the TCMA. PBL has the potential for energy recovery from the landfill gas generated and is a higher option on the Minnesota Waste Hierarchy than land disposal without landfill gas energy recovery.

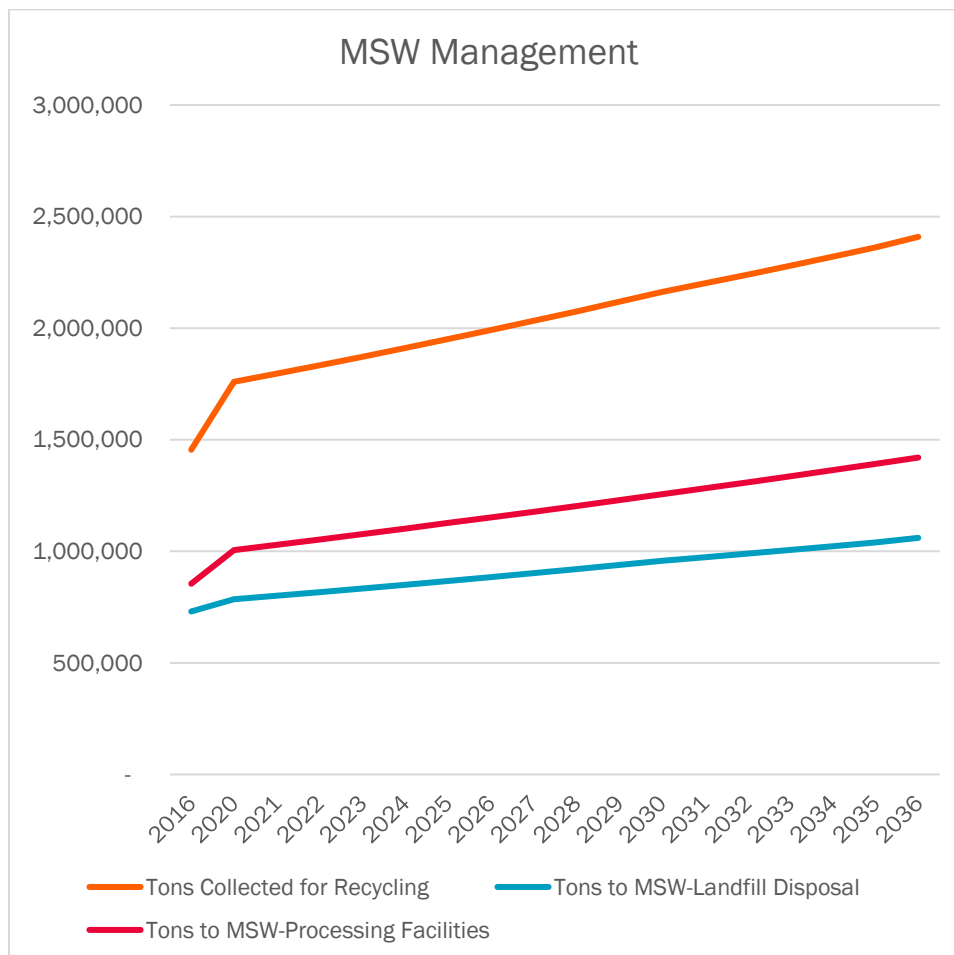
3.4 SUM OF MASTER PLANS – TRENDS AND GOALS

The TCMA Master Plans described the 2016 management of MSW in their respective counties. An aggregated table of MSW management is shown here.

Table 3-4: TCMA MSW Management Given Current Trends

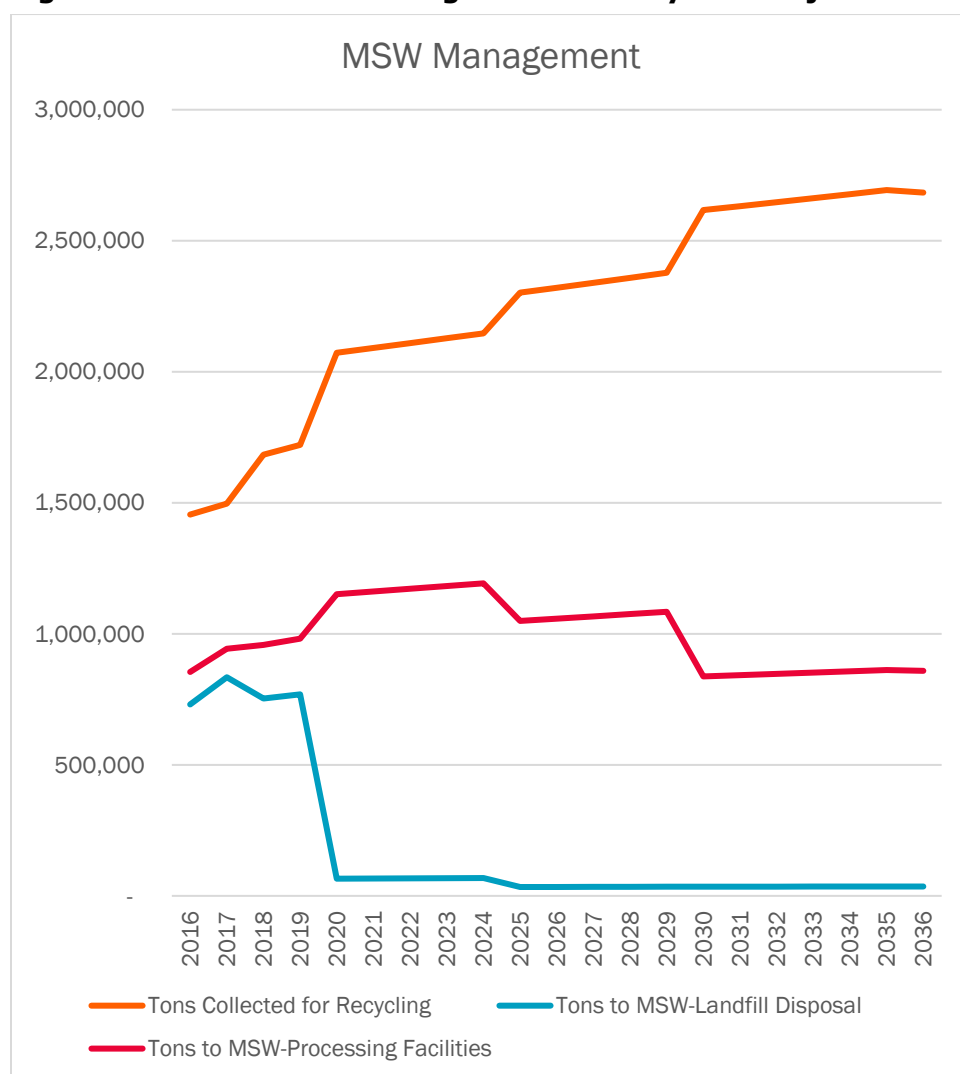
Year	Population	Tons Collected for Recycling		Tons to MSW-Landfill Disposal		Tons to MSW-Processing Facilities		Total Tons Waste
2016	3,051,926	1,455,093	48%	730,431	24%	854,662	28%	3,053,449
2020	3,180,407	1,592,428	48%	792,454	24%	939,226	28%	3,329,004
2025	3,323,807	1,770,779	48%	872,191	24%	1,049,593	28%	3,699,726
2030	3,461,545	1,967,742	49%	960,824	24%	1,166,263	29%	4,045,188
2036	3,587,473	2,198,374	49%	1,061,143	24%	1,313,991	29%	4,473,894

These values are shown visually here. The figure differs from Figure 2 of the Policy Plan slightly as it combines Recycling and Organics into a single Recycling value and there could be other differences in methodology.

Figure 3-1: TCMA MSW Management if Current Trends Continue

If the TCMA Counties meet the Policy Goals by 2036, the figure would change as shown below.

Figure 3-2: TCMA MSW Management if Policy Plan Objectives are Met



In absolute terms, the amount landfilled would drop from 730,000 tons in 2016 to 66,000 tons in 2020 and processing would increase from 0.85 million tons per year to 1.15 million tons per year. Recycling would increase from 1.5 million tons per year in 2016 to over 2 million tons per year in 2020. However, these projections do not account for the closing of the GRE facility.

3.5 SUMMARY

The plan documents support the granting of CON to PBL as part of its orderly development. PBL has a plan for how to expand landfill capacity while minimizing potential impacts by remaining on its current footprint. There is a need for the counties and haulers that currently utilize PBL to continue to landfill MSW. Permitting and granting CON for the increased capacity on the current footprint would help meet the goal of providing uninterrupted service and orderly development of solid waste disposal facilities. Granting this CON request would be in line with the Policy Plan's and Master Plan's objective of improving integrated solid waste management to protect natural resources and public health.

4.0 Alternatives

An alternatives discussion is not required because PBL is listed in the Policy Plan as accepting TCMA MSW. It is also explicitly listed in the Master Plans for Carver County², Dakota County, and Scott County with acknowledgements that waste from those counties is managed at PBL. PBL is a licensed MSW landfill in Dakota County. As the TCMA population grows and MSW generation increases, it is feasible and prudent to have landfill capacity available for that MSW.

The resource recovery plants serving the TCMA are operating at capacity. With the closing of GRE and the neighborhood opposition to expanding the capacity of HERC, TCMA MSW that is not recycled will need to be disposed of in land disposal facilities such as PBL.

Given the aggressive goals of the Policy Plan, it is important to consider that the potential impact of not having reliable landfill space available in Minnesota, specifically to serve the TCMA, will increase threats to public health and the environment through the increased travel distance of properly managing the region's solid waste and the potential for illegal dumping. Likely having to truck TCMA MSW to landfills in Wisconsin or Iowa increases wear and tear on roads and emits additional transportation-related pollutants and greenhouse gases. Other solid waste disposal facilities may not include gas recovery and be as high on Minnesota's solid waste hierarchy. It is neither feasible nor prudent to rely on the Policy Plan objectives being met without a contingency plan for proper solid waste management.

Additionally, in the next section, Estimate Errors are documented that support the request for 4 million tons of CON capacity over the next 10 years. Therefore, a more robust analysis of alternatives to the requested CON is not needed.

² "Land Disposal," page 24, showing 42% of Carver County landfilled waste utilized PBL.

5.0 Estimate Errors

According to Minn Rules 9215.0900 Subpart 5, if the amount of new capacity needed is greater than the amount identified in the approved plan due to erroneous assumptions concerning the amount of solid waste generated, the application must document the basis for calculating the amount of capacity needed in lieu of an analysis of alternatives.

In the Findings of Fact granting PBL CON in 2002, item 20 notes that the Master Plan included ambitious waste reduction goals, but “without information on how the waste reduction goals will be achieved, and thus reduce the need for land disposal capacity, the [Office of Environmental Assistance] finds that it is prudent to assure that adequate metropolitan area land disposal capacity will be available in the future.”³ This same principle should apply when comparing the most recent Policy Plan goals to recent MSW management trends.

5.1 CURRENT PROJECTIONS

Figure 2 of the Policy Plan, copied here, shows the projected management of TCMA MSW if current rates continue. From a current amount of approximately 800,000 tpy managed at landfills, projections show an increase to 1,000,000 tpy by 2030. The WTE trendline parallels the landfill trendline and rises from 1,000,000 tpy managed at WTE facilities to 1,200,000 tpy by 2030. However, it is unclear where the increased capacity for WTE would come from and does not account for the closing of GRE and loss of 320,000 tpy of MSW processing capacity.

³ State of Minnesota Office of Environmental Assistance. *In the Matter of the Application for a Certificate of Need for Additional Disposal Capacity at the Pine Bend Landfill. Findings of Fact, Conclusions of Law, and Order.* April 30, 2002.

Figure 5-1: Metro MSW Management at Current Rates

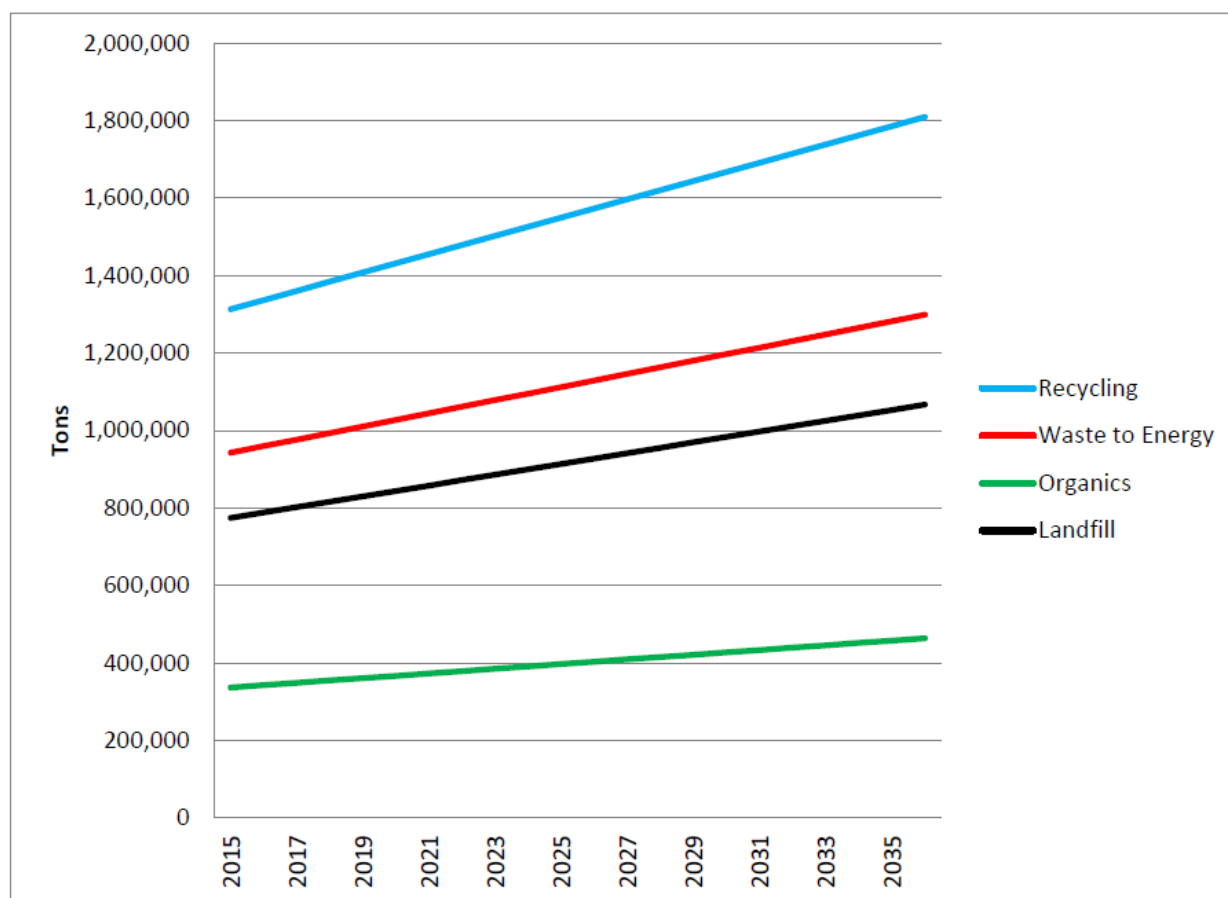


Figure 2 of the Policy Plan, reproduced

MPCA estimates regional waste generation to grow from 3.365 million tons of MSW in 2015 to 3.98 million tons by 2035. Minn. Stat. 115A.551 established a recycling and organics goal of 75% for the TCMA counties by 2030. The previous goal of 50% recycling, including organics management, was met in 2015.

While the objectives for maximum amount of waste landfilled show that the TCMA will reduce landfilling from 768,000 tpy in 2015 to 67,000 tpy in 2020, that estimate is not realistic. If MPCA were to insist on using the goals in the Policy Plan to restrict CON in the TCMA, it would be an estimate error that could have implications for the region's management of solid waste. Underestimating the future amount of waste needing disposal in the TCMA would adversely impact the planning required for the landfill operators. If more waste needs disposal and CON has not been issued, it adversely affects the orderly and deliberate development and financial security of waste facilities mandated by Minn Statutes 115A.02.

Appendix F of the Policy Plan discusses methodology for achieving the 75% recycling objective. It notes that a waste composition study found that 63% of the MSW at the study locations is either recyclable or compostable. If 100% of the material that is potentially recyclable or compostable, the regional recycling rate could reach 81%. That analysis does not account for the changing recyclables market and China's Green Fence.

The difference in the trends and Policy Plan objectives are significant. From 2021-2025, there would be a difference of nearly 1 million tons in the MSW generation estimates depending on whether the source reduction objectives are met. There would be nearly 2.3 million more tons of MSW recycled and 3.9 million tons of MSW landfilled in just those five years.

5.2 FUTURE SOLID WASTE GENERATION ESTIMATES

The TCMA Counties have passed Solid Waste Master Plans that, unlike Solid Waste Management Plans in Greater Minnesota counties, do not include detailed tables of estimated MSW generation and management for the planning future. They do include the Policy Plan objectives and qualitative analysis describing the County's plan for helping the TCMA achieve those goals. However, the trends indicate that the Counties will not achieve a 2% landfill rate by 2020. Therefore, the TCMA area needs the option of alternative disposal.

All the TCMA counties have a goal to move waste up the hierarchy and are working towards their legislated goal of 75% recycling and organics management. That progression will take time, and while the Policy Plan and stated goals are necessary to drive the waste management system changes needed to reach those goals, actually attaining the goals in the near future will be challenging. From previous CON Findings of Fact, "an alternative is not feasible if it is...not capable of reliable operation at the appropriate scale." At the present time, recycling and organics management systems are not yet able to manage the objective amounts of TCMA MSW.

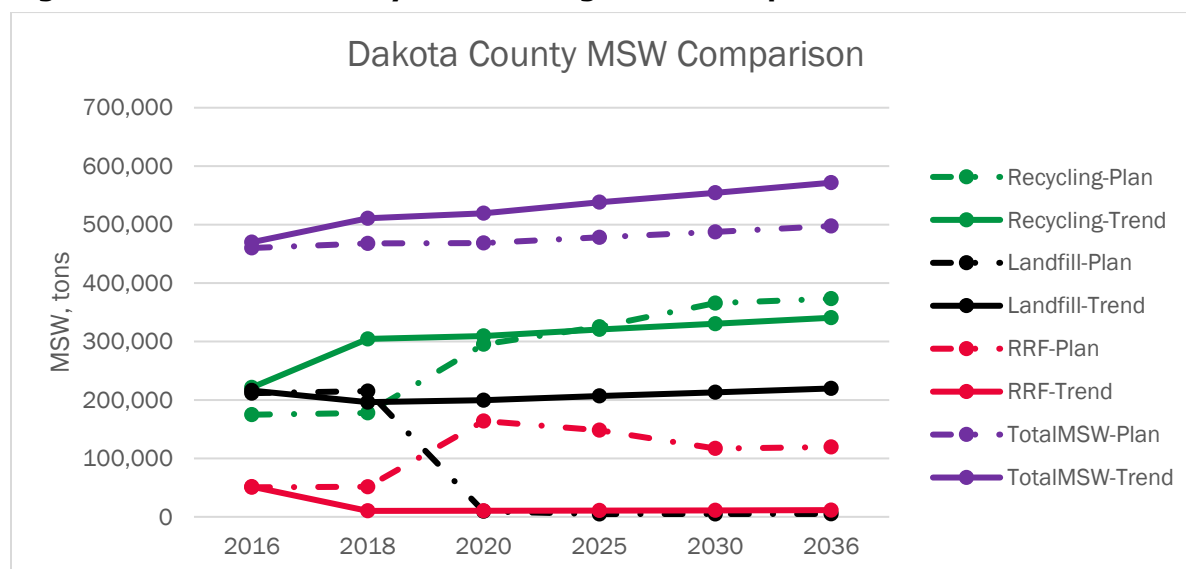
Resource recovery facilities have limited capacity to increase acceptance of MSW. Processing capacity for Metro MSW is maximized at 802,000 - 845,000 tpy depending on whether the Red Wing facility is included.

The difference in stated goals and actual likely amounts is illustrated by the example of Dakota County. The associated table and figure show the amount of total MSW and the amount expected to be recycled, managed in WTE facilities, and landfilled from 2016-2036. The difference in just this one county if management rates remain as they are in 2016 with 38% recycling and organics management, 11% sent to MSW processing facilities, and 46% landfill disposal.

Table 5-1: Dakota County Projected Solid Waste Management: Objectives and Trends

Year	Recycling		Landfill		Resource Recovery		Total MSW	
	SWMP	Trend	SWMP	Trend	SWMP	Trend	SWMP	Trend
2016	174,800	221,440	211,600	216,149	50,600	51,688	460,000	469,889
2018	177,754	304,356	215,176	196,260	51,455	10,199	467,773	510,815
2020	295,182	309,499	9,371	199,576	163,990	10,371	468,542	519,447
2025	325,195	320,730	4,782	206,819	148,251	10,748	478,229	538,297
2030	365,660	330,356	4,875	213,026	117,011	11,070	487,546	554,453
2036	373,162	340,656	4,975	219,667	119,412	11,415	497,549	571,739

Figure 5-2: Dakota County MSW Management Comparison



Note: "Plan" refers to the Policy Plan objectives, "Trend" is based on 2016 actual MSW management. RRF – Resource Recovery Facilities

The difference in the lines showing the expected amount based on 2016 solid waste management, represented by dashed lines, and the amount based on the Policy Plan in solid lines, shows the potential shortfall in safe, prudent, and feasible solid waste planning. The amount is very significant: nearly 15 million tons of MSW of total MSW that may need to be landfilled if the objectives are not met. That amount is more than half the total airspace of PBL and cannot be ignored based on objectives on paper. It is imperative that, given that the range of possibilities for the amount of waste landfilled from a single example county is on the order of 200,000 tons per year, the permitting of proper land disposal alternatives is necessary, including the granting of CON.

This section of the CON Request is needed because Minn Rules 9215.0900 Subp 3 states that "information about quantities of solid waste from counties or districts within the metropolitan area shall be based on information in approved county or district solid waste master plans." The plans are, in essence, not permitted to project solid waste management within their County assuming the county will not meet the objectives in the Policy Plan. Therefore, with such aggressive goals for recycling, organics management, and processing, the Estimate Errors section of this CON Request is the proper avenue for ensuring there is a prudent and feasible alternative for safe, reliable solid waste management for TCMA MSW.

6.0 CON Evaluation

This report has provided the necessary information required in a Certificate of Need Request for a landfill located in the TCMA as stated in Minn Rules 9215.0900.

The annual solid waste estimates are based on historical receipts of MSW at PBL and assume there will be a moderate decrease in percentage landfilled due to efforts to reach the Policy Plan objectives, yet an uptick in total MSW generated in the region as the population of the TCMA grows.

The origin of waste expected to utilize PBL for proper land disposal is primarily Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties: the seven TCMA counties. As PBL is an existing provider of solid waste management to these counties, and PBL is listed in the Policy Plan that serves as the basis for the county Master Plans, an alternatives section is not needed in this CON request. The waste projected to be landfilled is available for management at PBL.

The solid waste management objectives in the Policy Plan include high goals for recycling and organics management and erroneously assume the continued available capacity of all area resource recovery facilities. The difference in the Policy Plan objectives for landfilled MSW from TCMA and the potential actual available MSW for landfilling is significant.

The trend from the Policy Plan's Figure 2 shows that annual TCMA MSW tons managed via landfilling would increase from approximately 800,000 tons in 2016 to nearly 1.1 million tons in 2036. If current rates continue, landfills in Minnesota and nearby states would need to accept 15.7 million tons of MSW from 2020-2036. If the policy plan objectives are met, the amount of TCMA MSW landfilled would be 750,000 tons. That difference of nearly 15 million tons of MSW necessitates prudent contingency planning to assure that future waste disposal requirements are met. The Estimate Errors section of this report provides justification for granting PBL 4 million tons of CON over the next 10 years.

It is not prudent to run out of landfill space in Minnesota. With the resource recovery facilities full and recycling and organics management challenges, the CON request for PBL should be granted to ensure available capacity while thoughtfully planning integrated solid waste management.

7.0 References

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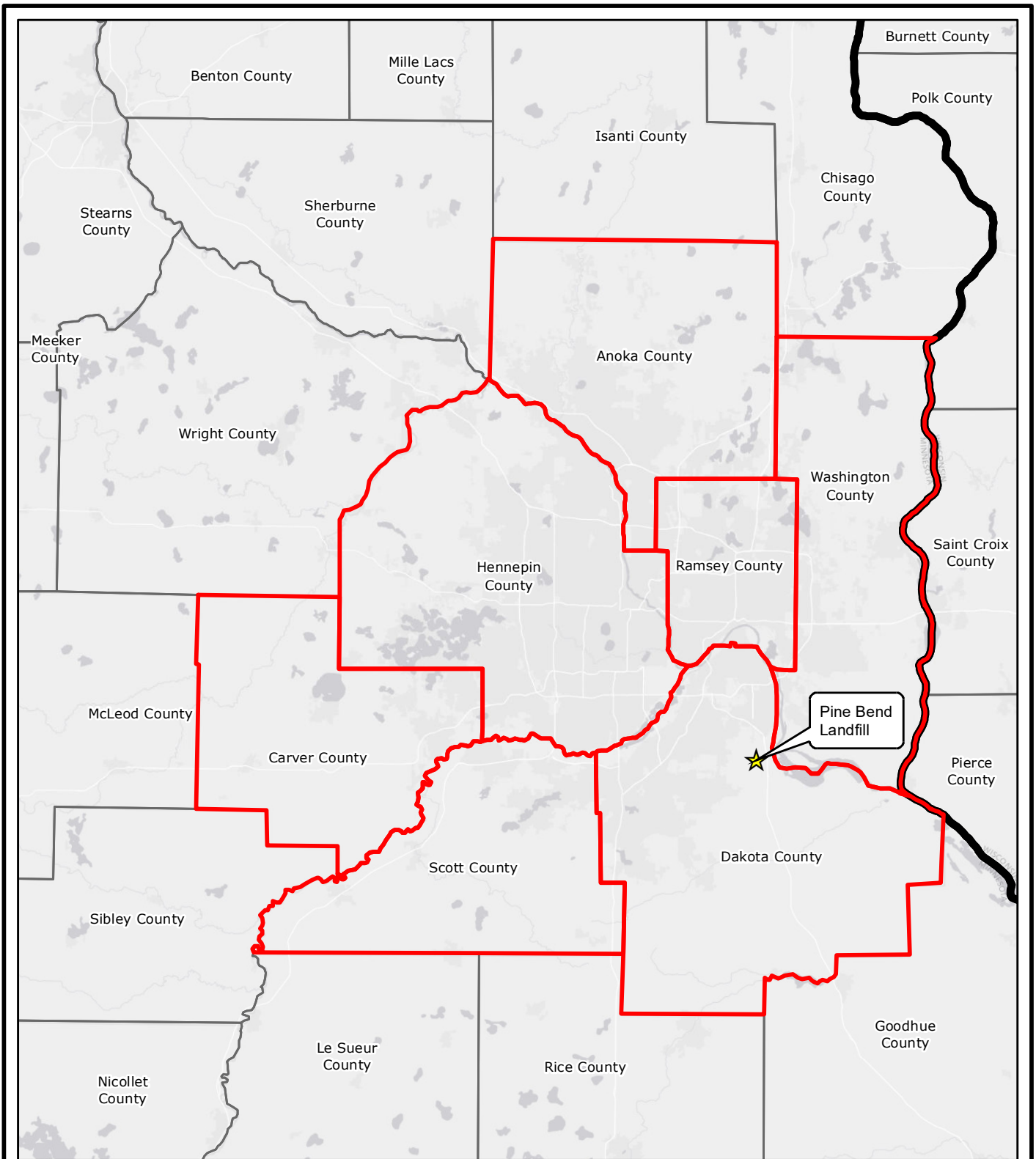
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Washington County Department of Public Health and Environment. *Waste Management Master Plan 2018-2036*. June 22, 2018.

Attached Figures

1. Location of BFI Solid Waste Facilities
2. Population of TCMA Counties, 2019 and 2030



Legend



Twin Cities Metro Area Counties



State Boundary



BFI Solid Waste Facility



County Boundary

Path: L:\099110991-0143\mxd\Location of BFI Solid Waste Facilities.mxd
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PINE BEND LANDFILL

Location of BFI Solid Waste Facilities

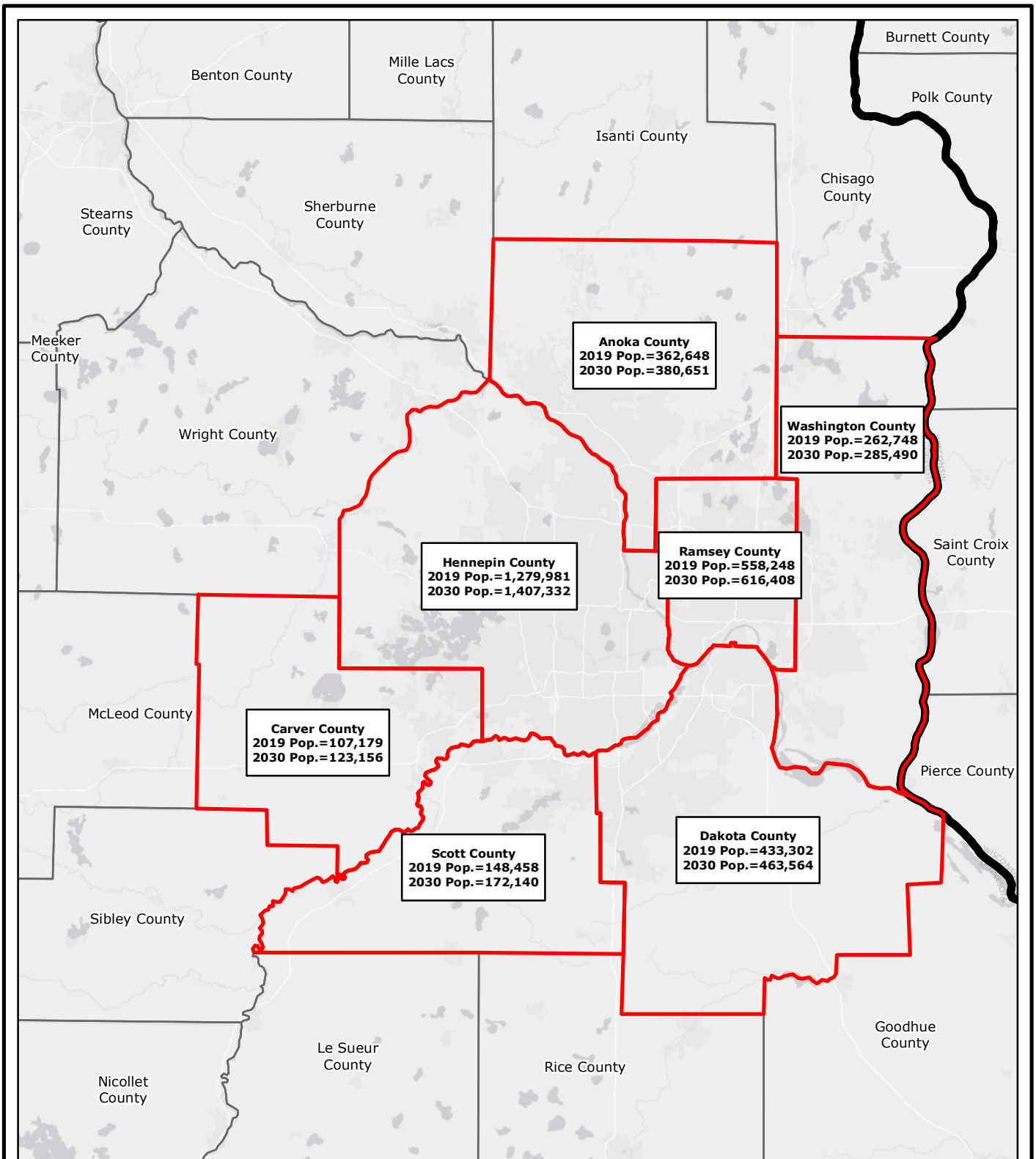


WENCK

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Figure 1



Legend



Twin Cities Metro Area Counties



State Boundary



County Boundary

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PINE BEND LANDFILL

Population of TCMA Counties, 2019 and 2030



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Figure 2



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