

EXECUTIVE SUMMARY

The following summarizes the solid waste management system selected to manage solid waste within the County. In case of conflicting information between the executive summary and the remaining contents of the Plan update, the information provided in the main body of the Plan update found on the following pages will take precedence over the executive summary.

OVERALL VIEW OF THE COUNTY (attach additional pages as necessary)¹

Township or Municipality Name	Population ²	% Land Use			% of Economic Base*			
		Rural	Urban	Ag	For	Ind	Com	Other
<u>Algonac</u>	<u>4923</u>	<u>13</u>	<u>87</u>	<u>7</u>	<u>0</u>	<u>1</u>	<u>9</u>	<u>83</u>
<u>Berlin Twp.</u>	<u>3174</u>	<u>95</u>	<u>5</u>	<u>85</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>15</u>
<u>Brockway Twp.</u>	<u>1942</u>	<u>96</u>	<u>4</u>	<u>85</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>15</u>
<u>Burtchville Twp.</u>	<u>4059</u>	<u>87</u>	<u>13</u>	<u>67</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>32</u>
<u>Capac</u>	<u>1704</u>	<u>64</u>	<u>36</u>	<u>54</u>	<u>0</u>	<u>4</u>	<u>12</u>	<u>30</u>
<u>Casco Twp.</u>	<u>5263</u>	<u>88</u>	<u>12</u>	<u>70</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>25</u>
<u>China Twp.</u>	<u>3448</u>	<u>86</u>	<u>14</u>	<u>70</u>	<u>0</u>	<u>3</u>	<u>2</u>	<u>25</u>
<u>Clay Twp.</u>	<u>10894</u>	<u>78</u>	<u>22</u>	<u>26</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>71</u>
<u>Clyde Twp.</u>	<u>6214</u>	<u>86</u>	<u>14</u>	<u>46</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>51</u>
<u>Columbus Twp.</u>	<u>3941</u>	<u>88</u>	<u>12</u>	<u>68</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>30</u>
<u>Cottrellville Twp.</u>	<u>3771</u>	<u>86</u>	<u>14</u>	<u>73</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>25</u>
<u>East China Twp.</u>	<u>3547</u>	<u>53</u>	<u>47</u>	<u>40</u>	<u>0</u>	<u>22</u>	<u>3</u>	<u>35</u>
<u>Emmett</u>	<u>325</u>	<u>84</u>	<u>16</u>	<u>79</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>18</u>
<u>Emmett Twp.</u>	<u>2158</u>	<u>96</u>	<u>4</u>	<u>80</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>18</u>
<u>Fort Gratiot Twp.</u>	<u>11223</u>	<u>54</u>	<u>46</u>	<u>39</u>	<u>0</u>	<u>3</u>	<u>5</u>	<u>53</u>
<u>Grant Twp.</u>	<u>1693</u>	<u>95</u>	<u>5</u>	<u>77</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>22</u>
<u>Greenwood Twp.</u>	<u>1403</u>	<u>96</u>	<u>4</u>	<u>86</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>12</u>
<u>Ira Twp.</u>	<u>6839</u>	<u>84</u>	<u>16</u>	<u>71</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>26</u>
<u>Kenockee Twp.</u>	<u>2469</u>	<u>94</u>	<u>6</u>	<u>82</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>16</u>
<u>Kimball Twp.</u>	<u>8478</u>	<u>78</u>	<u>22</u>	<u>42</u>	<u>1</u>	<u>2</u>	<u>6</u>	<u>49</u>
<u>Lynn Twp.</u>	<u>967</u>	<u>98</u>	<u>2</u>	<u>84</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>16</u>

¹ SEMCOG 1995 Land Use Cover

² SEMCOG 2020 Regional Development Forecast

Township or Municipality Name	Population	% Land Use		Ag	% of Economic Base*			
		Rural	Urban		For	Ind	Com	Other
<u>Marine City</u>	<u>5195</u>	<u>43</u>	<u>57</u>	<u>40</u>	<u>0</u>	<u>11</u>	<u>13</u>	<u>36</u>
<u>Marysville</u>	<u>9505</u>	<u>33</u>	<u>67</u>	<u>26</u>	<u>0</u>	<u>18</u>	<u>9</u>	<u>48</u>
<u>Mussey Twp.</u>	<u>2133</u>	<u>94</u>	<u>6</u>	<u>81</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>17</u>
<u>Port Huron</u>	<u>33003</u>	<u>10</u>	<u>90</u>	<u>2</u>	<u>0</u>	<u>11</u>	<u>18</u>	<u>69</u>
<u>Port Huron Twp.</u>	<u>8743</u>	<u>50</u>	<u>50</u>	<u>23</u>	<u>0</u>	<u>5</u>	<u>10</u>	<u>61</u>
<u>Riley Twp.</u>	<u>3150</u>	<u>92</u>	<u>8</u>	<u>81</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>17</u>
<u>St. Clair</u>	<u>6021</u>	<u>31</u>	<u>69</u>	<u>16</u>	<u>0</u>	<u>8</u>	<u>7</u>	<u>69</u>
<u>St. Clair Twp.</u>	<u>5959</u>	<u>83</u>	<u>17</u>	<u>59</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>35</u>
<u>Wales Twp.</u>	<u>2848</u>	<u>92</u>	<u>8</u>	<u>76</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>20</u>
<u>Yale</u>	<u>2092</u>	<u>46</u>	<u>54</u>	<u>41</u>	<u>0</u>	<u>5</u>	<u>16</u>	<u>39</u>

Total Population 167478

*Ag = Agriculture; For = Forestry; Ind = Industry; Com = Commercial; Oth = All Other Economic Bases
 Additional listings, if necessary, are listed on an attached page.

EXECUTIVE SUMMARY

In Accordance with the State of Michigan Solid Waste Management Act (Part 115 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended), the St. Clair County Solid Waste Management Plan provides guidance toward sound management principles through its policies, processes, and recommendations for the next five and ten years. The following is an overview, of the plan content, the plan's recommendations for programs and facilities necessary to handle the County's solid waste.

The introduction of the plan sets goals and objectives for the protection of public health, and the environment, as well as for the effective handling, processing, and disposing of solid waste generated within the St. Clair County.

The plan identifies population and economic characteristics of St. Clair County. Existing transportation networks, as well as current and planned land use are examined and illustrated on maps in following chapters. All season roads, on which waste haulers can transport waste to disposal sites with minimal impact, are shown. Because soils and hydrological information was discussed in previous Solid Waste Management Plans, this Plan does not point to any of these characteristics.

The county population is expected to increase between 2000 and 2010 by 9% to 182,766. With the population increase, the estimated tons of solid waste generated rise from 464,468 tons annually in 2000 to 487,940 tons by 2010 (an increase of 5%). This increase in estimated tons of solid waste is not proportionate to the expected increase in population because the level of fly ash generation is expected to remain level. Final volume estimates depend on the amount of compaction in the landfill as well as possible future expansion. Current and future estimates of waste by selected waste categories are also noted.

The center of waste generation was determined to be located in the eastern and southern portions of the County in the communities along the St. Clair River and Lake St. Clair. The cities of Port Huron and Marysville, and Fort Gratiot Township have nearly a third of the population of St. Clair County and generate over a third of St. Clair County solid waste (excluding fly ash generation). The center of waste generation for industrial waste is along the industrial corridors in Port Huron and Marysville.

The system of waste handling and disposal in St. Clair County is reviewed. A survey of waste haulers was conducted in 1998 and 1999 to identify private waste haulers serving the cities, villages and townships of the County. Nine haulers were identified in 1999 as being responsible for most residential and commercial waste collection.

A transfer facility/processing plant as well as two licensed landfill facilities are identified. These operations are: Smiths Creek Landfill, Range Road Property (Type III) Detroit Edison Co., and Howard Solid Waste Transfer and Reclamation Facility. Details of the waste quantity, operating status, waste types received, and site size are included in the Solid Waste Disposal Areas and Facility Descriptions sections of this Plan.

The County feels that existing, licensed facilities noted within the Solid Waste Disposal

Areas of this Plan will address county disposal needs for the five and ten year planning periods. By monitoring annual volume usage of the landfills and remaining disposal capacity, the County can sustain its capacity to provide waste disposal for the five and ten year planning periods and beyond.

In the event that an emergency closes landfill facilities and prevents the use of landfills in the facility plan, a contingency plan provides for inter-county agreements with specific terms for waste type, quantity, and time limits.

One of the goals of this Plan is to reduce the quantity and volume of St. Clair County's solid waste stream that must be disposed of in landfills. The means by which this goal will be met include waste reduction and resource recovery. The plan identifies several public and private efforts that work towards reducing the quantities and volumes of waste needing disposal. While there weren't any communities that arranged for curbside collection of recyclables in the 1990 Plan Update, this Plan identifies at least ten communities with curbside recycling arrangements. In addition, several communities have arrangements for yard waste collection.

St. Clair County has been actively involved in resource recovery since the 1990 Plan Update. The Resource Recovery program has expanded to include the County Office of Resource Recovery which administers a Recycling Drop-Off Program as well as a Household Hazardous Materials Collection Program. Other efforts of the Resource Recovery Office include public information and educational efforts.

The plan acknowledges the management system in place and reflects on current roles and recommended policies and programs to assure compliance with the plan. Responsible parties of the plan within the County government, and brief accounts of their duties in planning, implementation, and enforcement are noted.

Public participation is a vital element in the preparation of a Plan. The final sections of this plan give details on the public involvement process in the preparation of this plan as well as the planning committee's appointment procedure and the structure of the planning committee. Appendix C is reserved for further public comment, staff response, minutes of the public hearings, and similar records.

CONCLUSIONS

In conclusion, it is believed that through the efforts of the staff of the St. Clair County Metropolitan Planning Commission under the direction of the St. Clair County Solid Waste Management Planning Committee and under the review of local communities and the St. Clair County Board of Commissioners, this plan will provide for St. Clair County a workable, enforceable plan for the handling and disposal of solid waste generated in the county.

With the needs of the County set firmly in mind, this plan continues a goal set in the 1990 Plan of "self-sufficiency". St. Clair County plans to be self-sufficient and continues to implement flow control restraints on the importation or exportation of solid waste for disposal

from or to other counties in Michigan. While present landfill capacity is sufficient to handle County waste for the plan period, the County also plans to direct its efforts and resources to waste recovery, to reduce dependency on landfills through composting, recycling, education, waste reduction and reuse as recommended in the Plan. Through careful and thorough implementation of the plan, the county will be able to continue to deal effectively with its solid waste disposal needs in the future.

SELECTED ALTERNATIVES

St. Clair County's selected alternative is to retain the current solid waste management system. The solid waste management system selected is one in which landfill disposal continues as the primary means of disposal with increased emphasis placed on source reduction, recycling and composting. An overview of the major components of this system follows:

- **Collection and Transportation of Solid Waste:** The existing collection and transportation system will remain in place. Solid waste collection services will continue to be provided to all county residents, businesses, and industries. There are no governmentally operated municipal collection systems in St. Clair County. Nine hauling companies collect most of the County's residential waste. While it is not this plan's intent to preclude involvement by municipalities from providing solid waste collection services to citizens within their respective jurisdictions, this plan also encourages municipalities to consider the benefits of contracting for solid waste services, although such arrangements are certainly not mandated.
- **Disposal of Solid Waste:** Smiths Creek Landfill and Range Road Property (Type III) Detroit Edison Company will continue to meet St. Clair County's solid waste disposal needs for the five and ten year planning periods and beyond. Landfills in Sanilac and Huron Counties are available to provide additional disposal capacity on an emergency, contingency basis.¹
- **Resource Recovery:** The St. Clair County Resource Recovery Office will continue to manage recycling drop-off containers located throughout the county. Curbside recycling services and private recycling firms are established in many communities, and are described in detail in the following pages. This plan encourages all local municipalities to provide recycling opportunities for their residents, either through arrangements for curbside collection of recyclables or the provision of recycling drop-off sites.
- **Household Hazardous Materials:** The St. Clair County Resource Recovery Office will continue to manage the Household Hazardous Materials Collection Site at Smiths Creek Landfill. Another site may be established in the southern part of the county by the Resource Recovery Office. The St. Clair County Household Hazardous Materials Collection program is described in detail in the following pages. This plan encourages the County to work in partnership with public and private industry to provide expanded opportunities for separation and collection of potentially hazardous

¹ See Appendix D for special conditions affecting import or export of solid waste.

materials from residents.

- Composting: Two private composting facilities process the majority of yard wastes collected from residents and businesses in St. Clair County. Currently, there are five municipalities that arrange for curbside collection of yard wastes. Some communities provide drop-off sites for yard wastes and special items like Christmas Trees. "Backyard" composting by residents will continue to be encouraged. The MSU Extension Office and the Master Gardener Program will continue to operate compost bin sales and presentations. This plan encourages all local municipalities to provide composting opportunities for their residents, either through arrangements for curbside collection or the provision of yard waste drop-off sites.
- Resource Conservation and Waste Reduction: Resource conservation and waste reduction will be encouraged through voluntary efforts of residents, businesses and industries. The Resource Recovery Office should investigate ways to expand public information and education in this area.
- Public Information and Education: The Resource Recovery Office will continue to produce and operate informational and educational materials and programs for residents, businesses and industries in St. Clair County. Those programs and materials offered by MSU Extension offices will continue as well. This plan encourages public and private partnerships that aim to educate the public in the areas of solid waste disposal, resource recovery, resource conservation and composting. Entities such as environmental organizations, private non-profit groups, and others, are encouraged to become involved in public information and education efforts.

INTRODUCTION

GOALS AND OBJECTIVES

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

- (1) To utilize to the maximum extent possible the resources available in Michigan's solid waste stream through source reduction, source separation, and other means of resource recovery and;
- (2) To prevent adverse effects on the public health and the environment resulting from improper solid waste collection, transportation, processing, or disposal, so as to protect the quality of the air, the land, and ground and surface waters.

This Solid Waste Management Plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support:

Goal 1: Fulfill the requirements of Part 115 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA Part 115) for solid waste management planning

Objective 1a: File "Notice of Intent" naming the St. Clair County Metropolitan Planning Commission as the Designated Planning Agency (DPA) responsible for plan preparation.

Objective 1b: Form a Solid Waste Management Planning Committee pursuant to section 11534 of NREPA Part 115.

Objective 1c: Inventory and describe the existing solid waste management system in St. Clair County including all existing facilities where solid waste is being transferred, treated, processed, or disposed of.

Objective 1d: Estimate solid waste generation for five and ten year projections with regards to current disposal capacity.

Objective 1e: Conduct a public participation program which shall encourage the participation and involvement of the public and municipalities in the development and implementation of the solid waste management plan.

Goal 2: Continue to be self-sufficient in managing the solid waste generated in St. Clair County.

Objective 2a: Manage the use of landfills in St. Clair County so as to maximize the

life of all existing landfills in St. Clair County.

Objective 2b: Encourage maximum compaction of waste.

Objective 2c: Assure that solid wastes, source separated recyclable materials, and yard wastes are handled, processed and diverted from disposal in landfills.

Objective 2d: Prohibit importation of solid waste for disposal from other counties in Michigan.

Objective 2e: Prohibit exportation of solid waste generated in St. Clair County for disposal in other counties in Michigan.

Goal 3: Protect public health and the environment from the adverse effects of improper solid waste collection, transportation, processing and disposal.

Objective 3a: Promote solid waste practices that avoid adverse effects on the public health and environment.

Objective 3b: Assure that all non-hazardous solid waste generated in St. Clair County is collected and recovered, processed, or disposed of at facilities which comply with state laws and rules governing location, design and operation.

Objective 3c: Provide sufficient disposal capacity to accommodate the solid waste generated in St. Clair County for a 10-year planning period.

Objective 3d: Develop a countywide licensing and inspection program for solid waste haulers and solid waste transporting units.

Objective 3e: Promote the county household hazardous waste drop off/collection programs.

Objective 3f: Encourage municipalities to explore contracting with a single hauler for residential pickup of solid waste, recyclables and yard waste within the municipality.

Goal 4: Develop and promote public education programs on solid waste management.

Objective 4a: Educate citizens on appropriate solid waste handling and disposal techniques.

Objective 4b: Notify citizens about opportunities for solid waste management such as recycling, household hazardous waste collections/drop-offs, and special concerns through radio, television, flyers, and newspaper

announcements.

Objective 4c: Encourage the purchase of recycled content materials by promoting America Recycles Day and similar public event programs.

Goal 5: Reduce the quantity and volume of St. Clair County's solid waste stream that must be disposed of in landfills by increasing municipal solid waste diversion rates from current levels to a county average of 22 % by 2004 and 25 % by 2009.

Objective 5a: Identify existing community recycling programs, compost facilities, and solid waste management education programs in use in St. Clair County.

Objective 5b: Encourage continued participation in existing programs and expansion of these programs in communities that do not provide source reduction, source separation, composting and recycling.