

**SUMMARY OF RECOMMENDED CHANGES
2011 EVALUATION & APPRAISAL REPORT (EAR)**

Public Facilities Element – Solid Waste Sub-Element

Goals, Objective and Policies: The entire Sub-Element will be revised to reflect the proper formatting for all Goals, Objectives and Policies, as defined below:

Goal: General statement defining what the plan will ultimately achieve, typically beginning with “TO” followed by a transitive verb, such as, TO PROTECT or TO ENSURE.

Objective: A more specific statement than the stated Goal; describing actions that will help achieve the goal(s), typically beginning with the active verb providing the general direction, such as, “Implement”, “Promote” or “Protect”. Objectives use the term “will” and allow Policies to specifically require an activity with “shall”.

Policies: Specific statements that provide directives on how to achieve the objectives and ultimately the Sub-Element’s goals, typically beginning with phrases like, “The County shall promote...”, “The County shall continue to...” or “The District shall expand...” or similar phrases. Policies use the terms “may” or “shall” to provide specific direction.

Goals, Objective and Policies: The entire Sub-Element should be revised to reflect Department name changes, designee changes, renumbering due to objective and/or policy additions and/or deletions, and grammatical changes.

To be renamed, including Sub-Element, Goal and throughout Objectives and Policies

Goal – revision to incorporate guiding principles for solid waste management; reformatting

Objective 1 – minor revisions including reformatting

Policy 1.1 – minor revision to add explanatory details

Policy 1.2 – verify that “as amended” may be used in this context

Policy 1.4 – minor revision to add explanatory details

Objective 2 – reformatting; re-state to capture essence of subsequent Policies, as amended

Policy 2.4 – revisions to remove mandate to complete a date-specific task; consider alternate version for minor revision in reference to specific facility

Policy 2.5 – part of revision affecting multiple Elements to eliminate redundancy

Policy 2.8 – revision to reduce level of specificity

Policy 2.14 – New recommendation to add a Policy committing the County to maintain effective debris clean-up plans

Policy 2.18 – New recommendation to add a Policy committing the County to study improved waste management techniques

Policy 2.24 – New recommendation to add a Policy committing the County to evaluate viability of recycling agricultural plastic films

Policy 2.25 – New recommendation to add a Policy committing the County to explore feasibility of expanding Immokalee transfer facility to provide additional services

Policy 2.28 – New recommendation to add a Policy directing the County to assist other groups to establish recycling programs

Policy 2.30 – New recommendation to add a Policy directing the County to encourage the construction of sustainable buildings

Objective 3 – minor revision, including reformatting

Policy 3.2 – minor revision to delete a parenthetical statement

Policy 3.4 – New recommendation to add a Policy committing the County to encourage sustainable landscaping practices

Policy 3.5 – New recommendation to add a Policy ensuring the County meets recent, Statutory recycling rate

**Assessment of the Successes & Shortcomings
and Recommendations
for the Public Facilities Element – Solid Waste Sub-Element**

A. Introduction & Background:

The purpose of the Solid Waste Sub-Element is defined within its single Goal, which reads as follows:

PROVIDE AN EFFICIENT AND ECONOMICAL BALANCE OF PUBLIC AND PRIVATE SERVICES THAT WILL ENABLE THE PEOPLE OF COLLIER COUNTY TO MEET THE ESTABLISHED REQUIREMENTS FOR SOLID WASTE MANAGEMENT IN A MANNER TO ASSURE PUBLIC HEALTH AND SAFETY AND TO PROTECT THE AIR, WATER AND LAND RESOURCES OF COLLIER COUNTY.

The intent of the Solid Waste Sub-Element is to assure the provision of efficient and economical services that would enable the citizens of Collier County to meet their needs for solid waste collection and disposal while also assuring public health and safety in accordance with the criteria set forth in Rule 9J-5, F.A.C., and Chapter 163, Florida Statutes. The provision of public facilities and services for solid waste management is planned in correlation with future land use projections.

The annual update and amendment to the Capital Improvement Element, adopted January 28, 2008 included the initial step toward re-naming of this Sub-Element from the "Solid Waste" Sub-Element to the "**Solid Waste Disposal**" Sub-Element. The new name should be used in all titles, headings and text within this Sub-Element, and in all references to this Sub-Element found throughout the Growth Management Plan.

The original intent of the Solid Waste Sub-Element was to assure the provision of efficient and economical services that would enable the citizens of Collier County to meet their needs for solid waste management while also assuring public health and safety in accordance with the criteria set forth in Rule 9J-5, F.A.C., and Chapter 163, Florida Statutes.

The Goal should be revised to replace "air, water and land" with "environmental resources" and to add another statement, such as the following:

"In all aspects of solid waste management, adhere to the following Enduring Guiding Principles approved by the Collier County Board of County Commissioners at the Integrated Solid Waste Management Strategy Workshop on December 5, 2006:

- *Environmental and Growth Management Compliance – Environmental Compliance means managing the impacts to the air, soil, water, and wildlife as well as "quality of life" impacts to the community such as aesthetics, odor, noise, and traffic and Growth Management Compliance means satisfying the growth management requirements reported in the Annual Update and Inventory Report for both lined and permitted disposal capacity;*
- *Airspace Preservation - Airspace Preservation means managing solid waste upstream from disposal as a means to extend the remaining airspace (disposal) capacity at the Collier County Landfill;*

- ***Operational Excellence - Operational Excellence means optimizing the operations of our assets such as the Collier County Landfill and our Recycling Centers as well as the programs administered by the Public Utilities Division; and***
- ***Best Value Service - Best Value Service means that the services offered in the County reflect local and regional conditions and that the value of service is appropriately balanced with the cost of service. A component of Best Value Service is that there is a direct correlation between those that receive the benefits and those that pay for the services.***

This Goal should also be rephrased to improve its formatting as a “goal”.

B. Objectives Achievement Analysis:

OBJECTIVE 1: (COLLECTION)

Collier County shall continue to maintain a safe, dependable and efficient solid waste collection system.

Present facilities meeting – the current Level of Service include two (2) franchise collection areas and three Recycling Centers, as follows:

- a. Unincorporated County service area;**
- b. Immokalee service area;**
- c. Three (3) Recycling Centers;**
 - 1. Naples Recycling Center**
 - 2. Marco Recycling Center**
 - 3. Carnestown Recycling Center**

Objective Achievement Analysis:

This Objective is being achieved and should be retained, essentially as written. This Objective *should be revised to add the Immokalee Recycling Center as number four and replace “three Recycling Centers” with “four Recycling Centers”*, and rephrased to improve its formatting as an “objective”.

Policy Relevance:

There are four (4) policies within this Objective:

Policy 1.1:

The County shall continue to maintain and regulate commercial, multi-family and tax-bill based residential collection costs to ensure efficient and dependable service affordable to all users.

This Policy the County to continue to maintain and regulate collection costs to ensure efficient and dependable service that is affordable to all users. This Policy remains relevant and *should be revised to add an entry, such as the following:*

“The primary components of a solid waste collection assessment are:

- 1. Franchisee Contract***
- 2. Tipping Fees***
- 3. Administrative and Capital Program Costs”***

Policy 1.2:

The County shall retain its mandatory collection Ordinance Number 2005-54, as amended, and the mandatory commercial recycling Ordinance Number 2004-50, as amended.

This Policy calls for the maintenance of the County's mandatory collection ordinance. This policy remains relevant and *should be retained as written*.

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Questioning whether the use of “as amended” in this context makes this Policy self amending.]

Policy 1.4:

The County shall ensure public awareness and participation in solid waste collection issues by addressing such issues in duly noticed public meetings.

This Policy requires that all solid waste management issues be addressed at advertised public meetings. *This Policy should be revised to read, such as, “The County shall ensure public awareness and participation in solid waste recycling, reuse, waste reduction, household hazardous waste collection and disposal by addressing such issues in duly noticed public meetings and by advertising recycling, reuse, collection, and disposal strategies and tips by such media as local newspapers, flyers, magnets and TV and radio commercials.”*

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the amount of specificity introduced with “and tips by such media as local newspapers, flyers, magnets and TV and radio commercials” is unnecessary in a comprehensive plan document and should be removed from the proposed revision.]

OBJECTIVE 2: (DISPOSAL)

Collier County shall continue to utilize safe and efficient methods for environmentally sound disposal of solid waste in accordance with local, State and Federal regulations and shall continue to investigate improved methods and implement practices that meet this objective.

Objective Achievement Analysis:

A review of the policies associated with this Objective reveals that it is primarily concerned with the environmental impact of County landfills. However, it also contains a policy that references the County's Solid Waste Level of Service (LOS). The Objective is being achieved and *should be retained*, essentially as written. This Objective should be rephrased to improve its formatting as an “objective”.

Policy Relevance:

There are eight (8) policies within this Objective:

Policy 2.1:

The County shall continue to monitor groundwater as required by the regulatory permit conditions for the operation of the landfill and in compliance with State and Federal rules and regulations.

This Policy requires that groundwater wells be monitored. This policy remains relevant and *should be revised to add entries, such as the following, at the end:*

“and pursuant to the Section 2.7 of Landfill Operations Agreement with Waste Management Inc. of Florida. Dedicated ground water monitoring wells are located within the County’s landfills and are monitored for potential groundwater contamination in accordance with the State of Florida Permit Conditions.”

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the staff-proposed change is not necessary.]

Policy 2.2:

The County shall continue to maintain leachate and gas management systems at County landfills in order to comply with permit conditions.

This Policy calls for leachate and gas management systems to be installed at County landfills, as needed. Both County landfills currently have such systems in operation. This Policy remains relevant and *should be revised to add a statement, such as the following, at the end:*

“Pursuant to the Landfill Operation Agreement with Waste Management, Inc. of Florida (WMIF), Section 2.9 Gas Management System, WMIF shall maintain, revise and upgrade the system as needed to comply with permit conditions and Standard Levels of Service for the industry.”

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the staff-proposed change is not necessary.]

Policy 2.4:

By fiscal year 2010, the County shall acquire and/or retain the land inventory required for future solid waste operations, based upon selection of, including but not limited to, one or more of the following options in order of priority:

- 1. Develop the means to partially or completely divert solid waste from the landfill (additional recycling or alternative forms of disposal).**
- 2. Increase the maximum permissible elevation of the Naples Landfill so as to gain additional airspace capacity.**
- 3. Explore emerging conversion technologies that would allow for continued solid waste disposal operations within Collier County.**
- 4. Secure and utilize additional capacity at a landfill or landfills.**

This Policy requires the County to maintain sufficient land inventory for future landfills. The County’s adopted LOS for landfill capacity (as referenced in the Capital Improvement Element) is “10 years of permissible capacity at average disposal rate/previous five (5) years.” *This Policy should be revised to replace “By fiscal year 2010, the County shall acquire and/or retain the” with a statement, such as,*

“The County shall pursue the acquisition of” and replace “Naples Landfill” with “Collier County Landfill to a maximum elevation of 200 feet above grade”.

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the amount of specificity introduced with “a maximum elevation of 200 feet above grade” is unnecessary and should be replaced in the proposed revision with “a maximum permissible elevation”.]

Policy 2.5:

The Level of Service for Solid Waste Sub-Element shall be:

- a. Tons of solid waste per capita per year, used to determine landfill disposal capacity, is based on the average of the last three complete fiscal years actual lined cell tonnage activity.**
- b. Two (2) years of constructed lined landfill cell capacity at the disposal rate calculated per 2.5.a.**
- c. Ten (10) years of permissible landfill capacity at the disposal rate calculated per 2.5.a.**

The LOSS for solid waste disposal appearing in Policy 2.5 above is one of two locations within this GMP where these standards are shown. The other location is Policy 1.5; subsection “F” in the Capital Improvement Element. This dualism may be a simple matter of unnecessary redundancy, except that the two Policies are not the same. These differences should be reconciled and a single location selected for these LOSS to appear. If it is decided to show the LOSS in both locations, then the CIE could be formatted to provide the LOS Standards, while the Sub-Element entries could elaborate on the figures. This Policy will remain relevant in its reconciled format.

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Supporting staff suggestion to locate Level of Service Standards in the CIE, with this Sub-Element being revised to direct readers to the CIE for this information.]

Policy 2.8:

The Collier County Solid Waste Department shall continue to operate and maintain a hazardous waste collection facility. The facility shall operate five (5) days per week and will accept household hazardous wastes. Additionally, the Department shall continue to hold its hazardous waste collection day at least twice per year targeting residential households but also allowing small businesses to participate.

This Policy commits the County to holding at least one hazardous waste collection day (amnesty day) per year. This Policy remains relevant and *should be retained as written, with consideration given to the suggestion that there is no need for this level of specificity.*

New Policies, such as retaining six (6) of the twenty-two (22) previously suggested, should be added under Objective 2:

Policy 2.14: The County shall maintain an effective emergency storm debris cleanup plan, and identify and establish temporary debris storage and reduction sites.

Policy 2.18:

The County shall pursue State and Federal grants for, and participate in, feasibility projects for the investigation and development of improved techniques for waste collection, recycling, transfer and solid waste management consistent with the Enduring Guiding Principles.

Policy 2.24:

The County shall evaluate options to beneficially recycle plastic agricultural film.

Policy 2.25:

The County shall assess the feasibility of expanding the Immokalee Transfer Station, or developing a new facility to serve the Immokalee area, to become a full service recycling and reuse center equipped with such options as household hazardous waste processing, paint reuse, vegetative and yard waste drop-off, processing and composting, white goods drop-off, e-waste drop-off, furniture and construction & demolition debris (C&D), resale store, etc.

Policy 2.28:

The County will work with local institutions, schools, government buildings, or churches, to initiate programs for solid waste reduction, reuse, and recycling for their communities.

Policy 2.30:

The County will encourage the construction of Green Buildings (or Sustainable Buildings). Relative to solid waste management, this includes:

- *Recycled Content: Products with identifiable recycled content, including postindustrial content with a preference for post consumer content.*
- *Salvaged, refurbished, or remanufactured: Includes saving a material from disposal and renovating, repairing, restoring, or generally improving the appearance, performance, quality, functionality, or value of a product.*
- *Reusable or recyclable: Select materials that can be easily dismantled and reused or recycled at the end of their useful life.*
- *Recycled or recyclable product packaging: Products enclosed in recycled content or recyclable packaging.*
- *Durable: Materials that are longer lasting or are comparable to conventional products with long life expectancies.*

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that only Policies 2.14, 2.18, 2.24, 2.25, 2.28 and 2.30 are irredundant with existing Policies, and that the others should be removed from the proposed revision.]

OBJECTIVE 3: (RECYCLE AND RECOVERY)

The Collier County Solid Waste Department shall continue to maintain and update the Integrated Solid Waste Management Strategic Plan as directed by the Board of County Commissioners.

Objective Achievement Analysis:

The County's Solid Waste Management Department maintains the County's solid waste disposal activities in accordance with an Integrated Solid Waste Management Strategic Plan that includes Short, Intermediate, and Long Term Measures. The County recommends that this Objective be modified to reflect the "**Integrated Solid Waste Management Strategic Plan,**" instead of the "Solid Waste Master

Plan.” Based on the above, this Objective is being achieved and *should be retained*, essentially as written. This Objective should be rephrased to improve its formatting as an “objective”.

Policy Relevance:

There are three (3) policies within this Objective.

Policy 3.2:

The County shall continue investigation and implementation of cost-saving measures for County disposal operations. The County shall evaluate other measures, including landfill mining, as new technologies and practices emerge. (Currently, a methane gas collection program is in operation.)

This Policy requires the County to “continue investigation of cost-saving methods for landfills.” The policy remains relevant and *should be revised to delete* “(Currently, a methane gas collection program is in operation.)”

Two Policies, such as the following, should be added under Objective 3:

Policy 3.4:

The County will encourage xeriscape landscaping (or Sustainable Landscaping) to reduce the generation of yard waste and reduce water consumption. In practice, xeriscaping means simply landscaping with slow-growing, drought tolerant plants to conserve water and reduce yard waste.

COULD BE MOVED TO UNDER 3.1, ABOVE.

Policy 3.5:

The County shall develop and implement innovative programs to reduce, re-use and recycle solid waste to meet the 2020 FDEP 75% Recycling Rate pursuant to FS Chapter 403.7032.

This new policy follows the recent adoption of the referenced Statute.

CONSIDER INTRODUCING A NEW OBJECTIVE AND SUBSEQUENT POLICY OR POLICIES FOLLOWING FROM THE 2009 ADOPTION OF HB 697.

[Public Comment from March 15, 2010 EAR Public Meeting – Suggesting the County should study ideas to target GHG sources – beside transportation, to address a lack of energy efficient plans, to address the need to plan for sea level rise.]

[Planning Commission (CCPC) Comment from August 27, 2010 EAR Workshop – Suggesting that the amount of change introduced with Objectives and Policies following from the adoption of HB 697 may be misplaced and consideration for any such change may serve better if consolidated to address multiple Elements or Sub-Elements at another location, and should be removed from the/as a proposed revision.]

The following page is from the Solid Waste portion of the 2010 Annual Update and Inventory Report (AUIR), approved by the BCC on November 10, 2010. The chart shows the land fill diversion effort of Collier County Solid Waste, a reduction from 1.23 tons per capita in 2000 to .54 tons per capita in 2009. This Forty-Four percent reduction in per capita disposal rate accomplished by the residential and commercial recycling programs stands as one of the most significant County-wide efforts to promote sustainability and directly relates to the major issue of Climate Change.

Collier County Government
Public Utilities Division
2010 Annual Update and Inventory Report (AUIR)

**Table 1: Collier County Landfill Disposal Capacity
Level of Service Standard: Ten Years of Permitted Landfill Capacity
at Previous Three Years Average Tons Per Capita Disposal Rate**

July 15, 2010

1	2	3	4	5	6	7
Fiscal Year	Peak Population	Tons Per Capita Disposal Rate	Annual Tons Disposed	Total Landfill Capacity Balance (tons)	Next Ten Years Landfill Capacity Requirement (tons)	Ten Year Permitted Landfill Capacity Surplus or Deficiency (tons)
2000	309,511	1.23	381,499	4,537,914	2,851,746	1,686,168
2001	325,159	1.32	430,511	4,107,403	2,649,128	1,458,275
2002	341,954	1.07	366,547	3,740,856	2,514,700	1,226,156
2003	359,191	0.80	288,409	5,820,359	2,462,714	3,357,645
2004	374,384	0.78	291,903	9,130,976	2,411,619	6,719,357
2005	386,668	0.71	274,777	9,695,124	2,382,460	7,312,664
2006	396,310	0.70	278,384	9,920,278	2,354,944	7,565,333
2007	400,027	0.64	254,889	9,594,647	2,356,287	7,238,360
2008	399,532	0.61	241,816	9,282,412	2,376,181	6,906,231
2009	399,979	0.54	215,338	8,831,381	2,428,149	6,403,233
2010	404,032	0.52	209,172	8,622,209	2,491,663	6,130,547
2011	411,524	0.55	227,893	8,394,316	2,541,610	5,852,706
2012	419,155	0.55	232,119	8,162,197	2,592,584	5,569,613
2013	426,928	0.55	236,423	7,925,774	2,644,604	5,281,170
2014	434,845	0.55	240,808	7,684,966	2,697,693	4,987,273
2015	443,531	0.55	245,618	7,439,349	2,751,116	4,688,232
2016	453,013	0.55	250,869	7,188,480	2,804,115	4,384,365
2017	462,698	0.55	256,232	6,932,248	2,856,653	4,075,595
2018	472,590	0.55	261,710	6,670,538	2,908,696	3,761,842
2019	482,694	0.55	267,305	6,403,233	2,960,207	3,443,026
2020	492,410	0.55	272,686	6,130,547	3,011,482	3,119,064
2021	501,718	0.55	277,841	5,852,706	3,062,831	2,789,875
2022	511,202	0.55	283,093	5,569,613	3,114,240	2,455,373
2023	520,866	0.55	288,444	5,281,170	3,165,696	2,115,473
2024	530,711	0.55	293,896	4,987,273	3,217,185	1,770,088
2025	540,002	0.55	299,041	4,688,232	3,269,103	1,419,129
2026	548,716	0.55	303,867	4,384,365	3,321,859	1,062,506
2027	557,571	0.55	308,770	4,075,595	3,375,467	700,128
2028	566,568	0.55	313,753	3,761,842	3,429,940	331,902
2029	575,712	0.55	318,816	3,443,026	3,485,292	(42,266)
2030	585,002	0.55	323,961	3,119,064	N/A	N/A
2031	594,443	0.55	329,189	2,789,875	N/A	N/A
2032	604,036	0.55	334,502	2,455,373	N/A	N/A
2033	613,784	0.55	339,900	2,115,473	N/A	N/A
2034	623,689	0.55	345,385	1,770,088	N/A	N/A
2035	633,754	0.55	350,959	1,419,129	N/A	N/A
2036	643,982	0.55	356,623	1,062,506	N/A	N/A
2037	654,374	0.55	362,378	700,128	N/A	N/A
2038	664,934	0.55	368,226	331,902	N/A	N/A
2039	675,665	0.55	374,168	(42,266)	N/A	N/A