

The Villages®

Community Development Districts

Update on the Solid Waste Management Plan

Prepared for the North Sumter County
Utility Dependent District

May 6, 2020




Jacobs

Purpose of Today's Meeting

- The District is preparing a Solid Waste Management Plan (SWMP)
- The SWMP is being developed in a transparent manner, with input from the residents
- This meeting will update the Board and residents about solid waste and recycling program alternatives
- Provide additional direction to Staff to prepare contracts based on guidance received today

Process and Schedule

June - Discussed solid waste and recycling program in The Villages and provided an overview of current trends for solid waste and recycling



August - Workshop with residents and NSCUDD Board to collect information and identify preferences



October - Workshop presentation of options for residents and NSCUDD Board comment



November – Recommendations to the NSCUDD



January – Provided a project update

District Goals for the solid waste and recycling program based on Community input

- Maintain a high level of satisfaction for collection of solid waste, recycling, yard trash and bulky waste
- Provide an education program to assure that residents are aware of the current program and understand how to optimize the program
- Provide recycling and disposal services, but allow flexibility in the future to keep the program cost-effective



Summary of Previous Meetings

Topics Discussed at June Meeting

- Discussed existing solid waste and recycling program in The Villages
- Provided an overview of current trends for solid waste and recycling (Globally, Nationally, Florida, and The Villages)
- Discussed the difficulty in marketing recyclables due to policies and restrictions that Asian countries have placed on the import of recyclables

Solid Waste Operations in The Villages

- Amount of material collected in 2019
 - Residential Waste: 22,329 tons
 - Commercial Waste: 7,607
 - Recyclables: 11,041 tons
 - Brush: 6,621 tons
 - Total: 47,598 tons
- Equipment
 - 11 Solid waste rear loading trucks
 - 6 Recycling rear loading trucks
 - 2 Commercial front loading trucks
 - 1 Bulk / White Goods truck



Where Does My Solid Waste and Recycling Go?



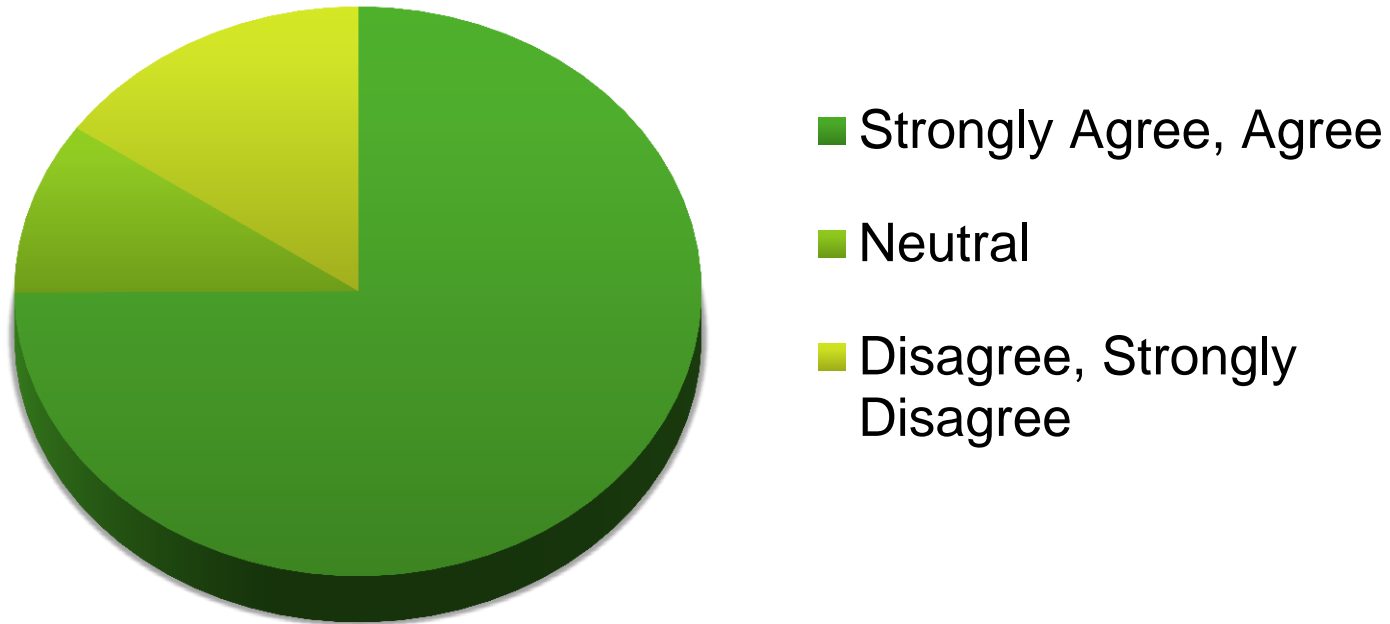
Topics Discussed at August Meeting

- Provided additional information based on questions received at the June meeting
- Provided an opportunity for ≈ 100 residents to express their desires and preferences related to the program
 - Residents used electronic voters to respond to questions related to solid waste, recycling, yard and bulky waste
- Held four breakout sessions to discuss the program in greater detail



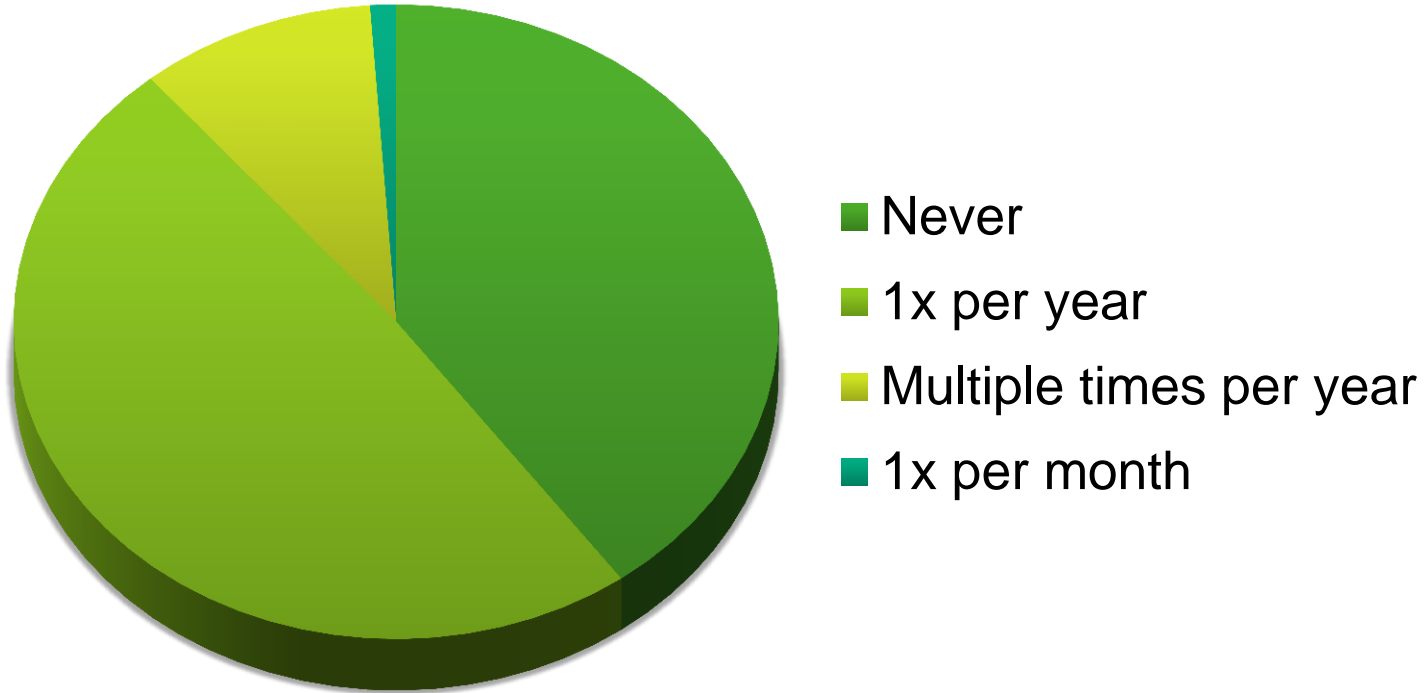
Summary of Residents Responses

Satisfied with the current recycling collection service?



Summary of Residents Responses

Use of bulky waste pick-up?



Topics Discussed at November Meeting

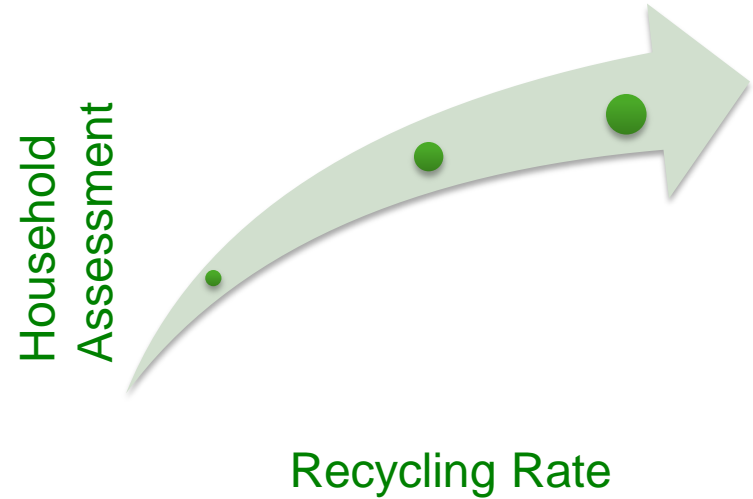
- Potential Options for the Recycling Program and Solid Waste Disposal
- Board requested staff examine options and develop final options
 - Improve collections
 - Prefer sustainable disposal methods compared to long-haul landfill disposal
 - White goods disposal
 - Education and public outreach consistent with the future program
 - Preliminary negotiations for management of recyclables and solid waste with privately-owned facilities

Potential Options for the Residential Recycling Program

- Improve recycling under current program through education
- Stop recycling materials that have no market value
 - Newspaper, mixed paper, mixed plastics, and glass
- Increase recycling through education and additional materials
- Consider use of Energy from Waste (EfW) facility

Cost of Recycling Compared to Disposal

- The District's cost to recycle is higher than the cost to landfill
 - \$80 per ton cost to recycle
 - \$41 per ton for landfill disposal in FY 20/21
- The more material recycled, the higher the household assessment



What Solid Waste Management Options are Available?

Identify

- Identify solid waste facilities within 75 miles

Screen

- Screen facilities that would accept material from The Villages

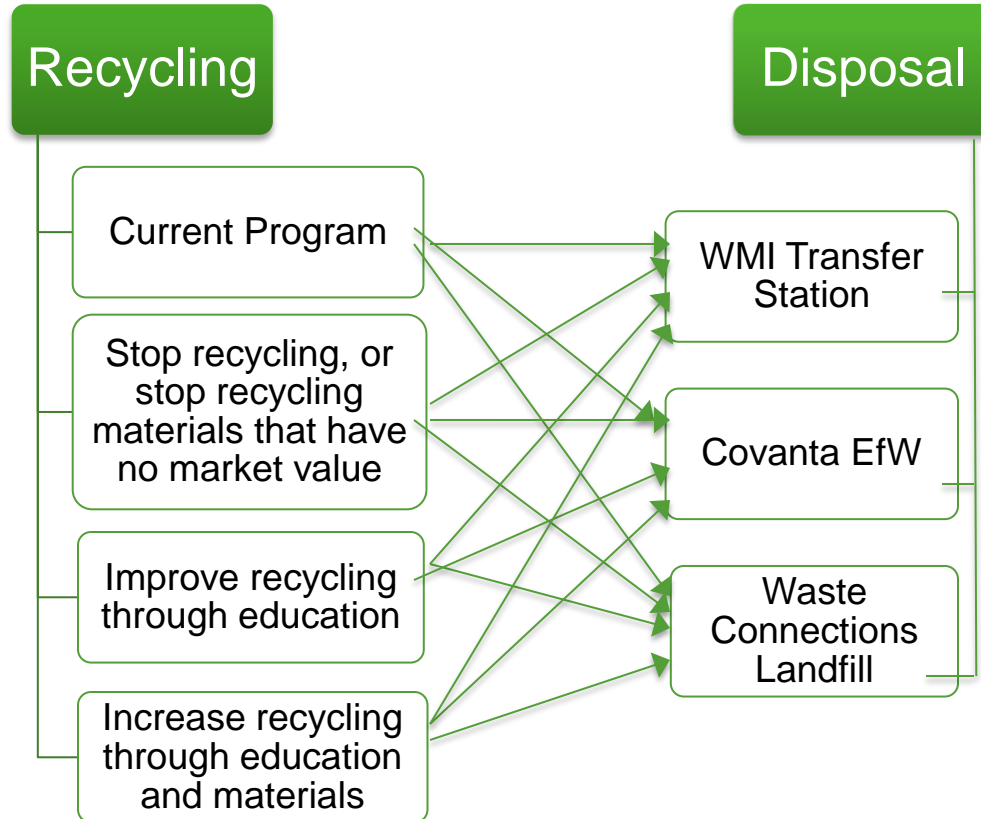
Data

- Determine haul distance and tipping fee

Cost

- Determine total cost and household assessment

The District reevaluated options and how to combine them





Current Cost per Household

Historical Monthly Cost per Household

Year	Trash	Yard Waste	Recycle	Total Cost	Household Fee	Difference
FY 15/16 Actual	\$10.50	\$2.90	\$5.22	\$18.63	\$17.90	(\$0.73)
FY 16/17 Actual	\$10.28	\$2.83	\$4.92	\$18.04	\$17.90	(\$0.14)
FY 17/18 Actual	\$10.56	\$2.94	\$5.29	\$18.78	\$17.90	(\$0.88)
FY 18/19 Budget	\$10.99	\$3.02	\$5.58	\$19.59	\$17.90	(\$1.69)
FY 19/20 Budget	\$11.49	\$3.15	\$5.83	\$20.48	\$19.38	(\$1.10)

Total costs include collection, disposal, bond, and District costs

FY 19/20 Budget does not include recent cost increase to recycling program

Bond Fund Sufficiency

- In December 2012, NSCUDD issued \$54.6M bonds for the purchase of Sumter Sanitation
- NSCUDD recently reviewed the sufficiency of the Fund's revenues to meet its ten-year financial requirements
- In FY 2019, the minimum debt service coverage was not achieved, there was a shortfall of \$450,000
- Board approved an increase in the monthly Household Assessment from \$17.90 to \$19.38 for FY2020

Bond Fund Sufficiency impact on Monthly Fee per Household

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Base	\$19.38	\$19.86	\$20.36	\$20.87	\$21.39
Approved (2.5%)	\$0.48	\$0.50	\$0.51	\$0.52	\$0.53
Total	\$19.86	\$20.36	\$20.87	\$21.39	\$21.92

Rates were determined prior to increase in cost of recycling



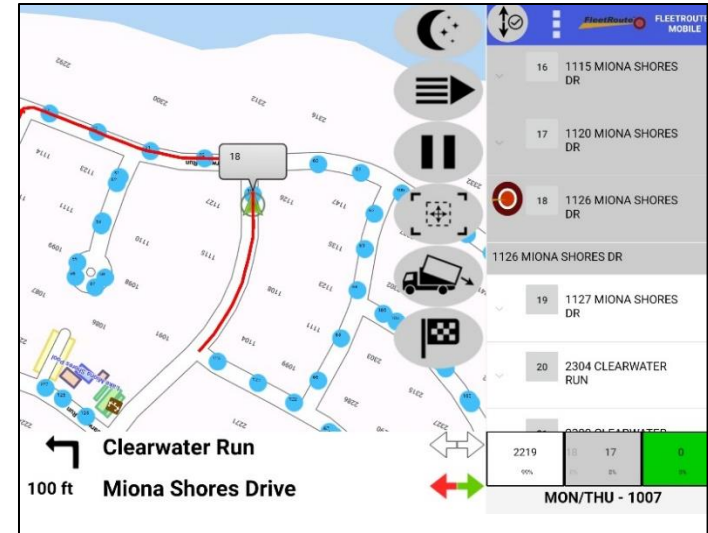
Comparison of Options

Board Direction at November Meeting

- Direct Jacobs to continue to optimize truck routing based on proposed changes and evaluate truck size to provide a cost effective system
- Consider a fee for bulky waste/white goods pickup
- Review recycling options
- Enter into preliminary negotiations for long term of management of recyclables and solid waste with privately-owned facilities
- Preference of more sustainable disposal methods (local EfW) compared to long-haul landfill disposal
- Staff develop final options and report back to the Board

Improvements that Jacobs will implement to meet Board Direction

- Continue to optimize routing using a GPS-based system
- Evaluate yard waste collection in winter
- Evaluate larger truck size to provide a cost effective system
 - Testing 25 CY vs existing 20 CY
 - Constraints in some villa neighborhoods
- Continue to improve the bulk waste white goods program



Bulk Waste and White Goods Collection

- Current system is an on-call service, operating 5 days per week
- In 2019, made 10,879 pick-ups of material
 - Bulk items include furniture, bicycles, lawn mowers, mattresses, toilets, carpeting, white goods, computers, and other electronic equipment
- Potential fee of \$10 per pick up to recover some of the costs

Definition of Final Options

Option	Waste Streams
Waste Management, Inc. (WMI)	No change from current plan MSW, recycling and yard waste to WMI Transfer Station
Covanta and Waste Management, Inc.	MSW to Covanta EfW Recycling and yard waste to WMI Transfer Station
Covanta	All material collected commingled and taken to EfW

Factors considered for evaluation

- Number of times a Collection Truck drives past a House - Total number of times per week a truck drives past a house to collect all material, less is better
- Miles traveled - Miles traveled by collection trucks to facility, or miles traveled by transfer trailers to facility, less is better
- Recycling Rate – amount of material beneficially reused, more is better
- Sanitation fee per household - \$/household per month, less is better

Comparison of Final Options

	WMI	WMI and Covanta	Covanta
Number of times a Collection Truck drives past a House	4	3	2
Total (collection and transfer) truck miles	503,500	274,500	254,800
Recycling Rate	27%	62%	56%*
Fee per household/month in FY 20/21	\$20.85	\$22.05	\$22.24

*Florida Statue 403.706 - In order to promote the production of renewable energy from solid waste, each megawatt-hour produced by a renewable energy facility using solid waste as a fuel shall count as 1 ton of recycled material.

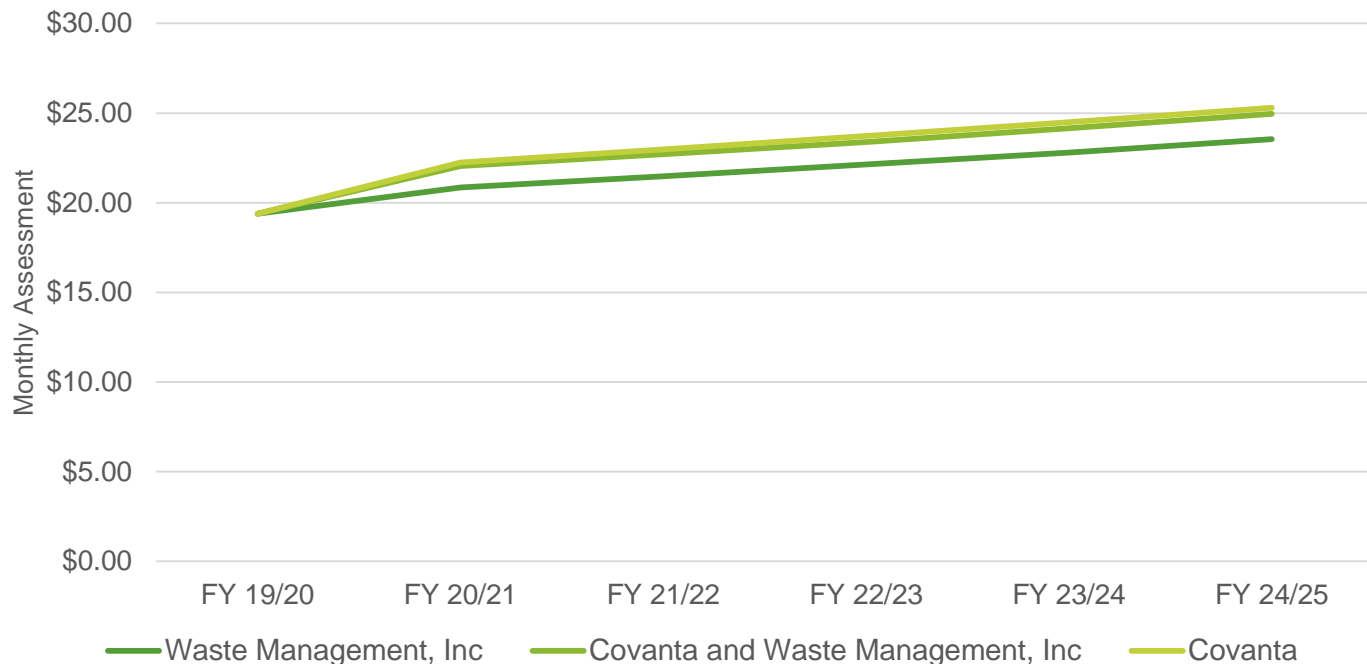
Cost of Final Options

Option	MSW (tons/year) 28,000	Yard Waste (tons/year) 7,000	Recycling (tons/Year) 13,000
Waste Management, Inc.	\$41.00	\$27.50	\$80.00
Covanta and Waste Management, Inc.	\$69.00	\$27.50	\$80.00
Covanta	\$69.00	\$69.00	\$69.00

Comparison of Monthly Household Assessment for Final Options

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Waste Management, Inc.	\$20.85	\$21.48	\$22.13	\$22.80	\$23.54
Covanta and Waste Management, Inc.	\$22.05	\$22.71	\$23.39	\$24.16	\$24.95
Covanta	\$22.24	\$22.97	\$23.72	\$24.50	\$25.30

Comparison of Monthly Household Fee for Final Options



Path Forward

- Request direction from Board regarding:
 - Finalize the Solid Waste Management Plan
 - Fee for bulky waste/white goods pickup
 - Finalize negotiations for long term of management of recyclables and solid waste with privately-owned facilities
 - Report back at June 14th Board meeting



Thank you for attending!