

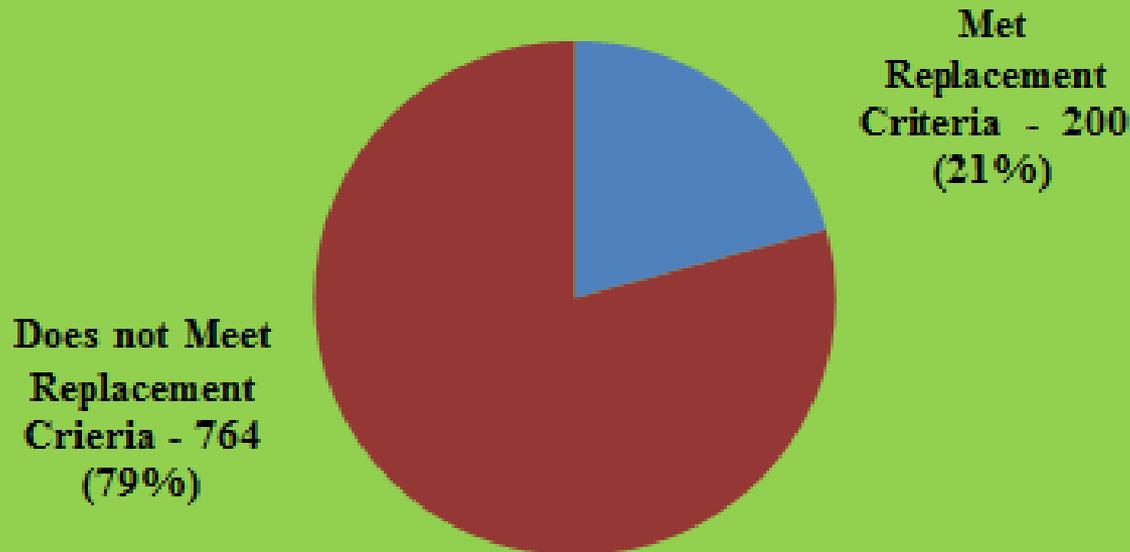


Analysis of BCB Fleet Replacement

Background

SFWMD Audit of Fleet Utilization

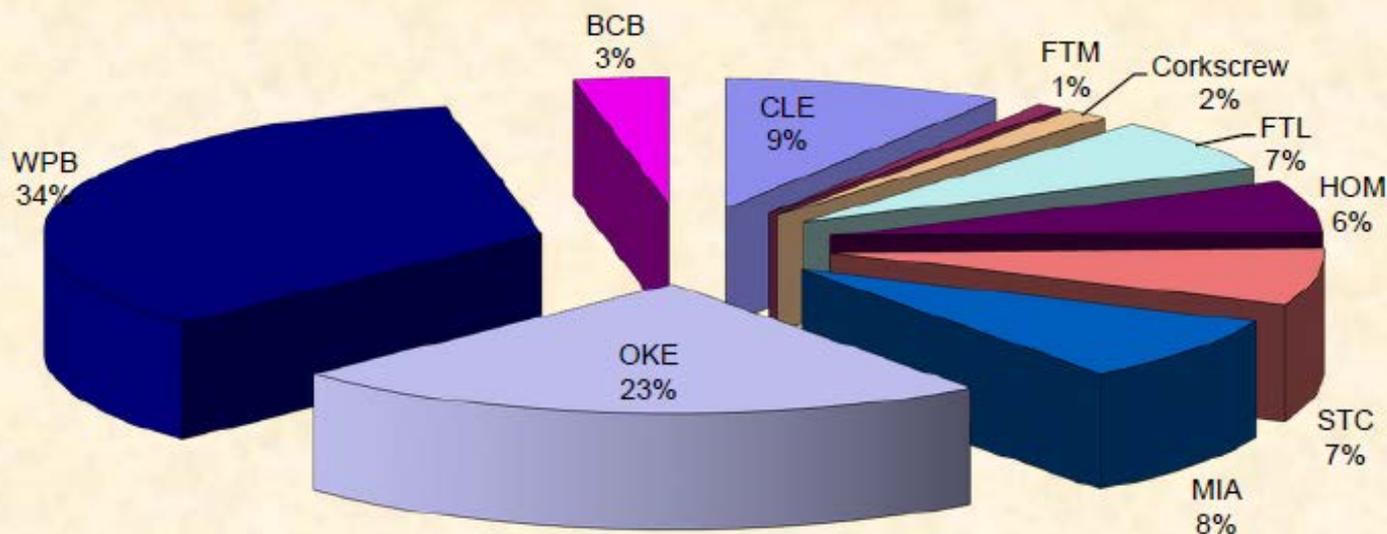
Audit's Estimated Number of Fleet Inventory that Met Replacement Criteria



Objectives

- ❖ **Performed the same analysis as the SFWMD audit for the BCB's fleet.**
- ❖ **Determined which vehicles/equipment meet the District's replacement criteria.**
- ❖ **Ascertained estimated replacement costs.**

SFWMD Fleet Distribution By Location



FY 2014

BCB Fleet Units

Type	Equipment Type	Total
On-Road	Light Trucks	15
	Medium / Heavy Trucks	5
	Total On-Road	20
Off-Road	Heavy Equipment (e.g., excavators and backhoes)	5
	Marine (e.g., weed harvesters and towboats)	6
	Trailers (e.g., to transport equipment & materials)	6
	Total Off-Road	17
As of September 2015		Total
37		
<i>Note:</i> Miscellaneous equipment (e.g., motors, self propelled boom lift, and mowers) not analyzed		6

Fleet Replacement Criteria

Vehicles/Equipment/Boats Replacement Criteria				
Classification	Age	Miles / Hours	Maintenance Cost per Mile / Hour	Other Factors
Light Vehicles	12 years	180,000 miles	Average Total MC / Total Miles or Hours by Vehicle Classification	Must meet two of three criteria, plus a physical inspection
Medium / Heavy Trucks	15 years	300,000 miles		
Construction and Marine Equipment	15 years	5,000 hours		

Scheduled for Replacement in FY 2016

MEETS ALL CRITERIA

- ❖ #10028597 - Aquamog Weed Harvester
- ❖ 21 year old in 2015 (Acquired in 1994)
- ❖ Used 15,274 Hours, as of FY 2015
- ❖ \$29,971 in Maintenance Cost from FY 13 - FY15



Example Marine Equipment that Meets Replacement Criteria

MEETS AGE & MC CRITERIA

- ❖ #10028246 - Aquamog Weed Harvester
- ❖ 18 year old in 2015 (Acquired in 1997)
- ❖ Used 4,065 Hours, as of FY 2015
- ❖ \$34,988 in Maintenance Cost from FY 13 - FY 15



Example Light Vehicle that Meets Replacement Criteria

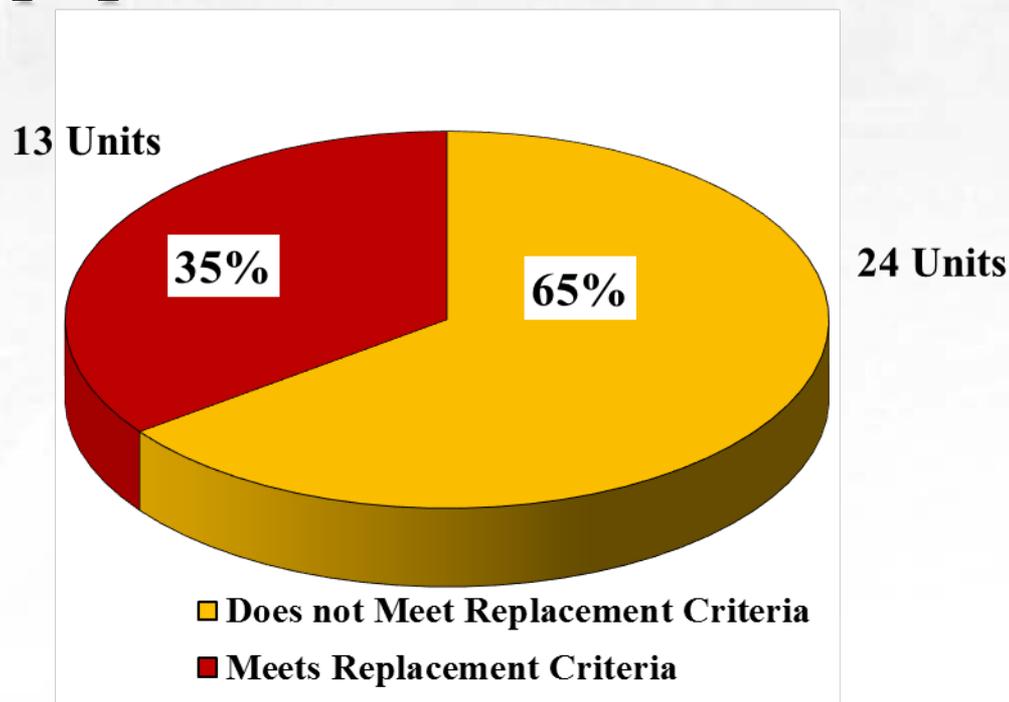
MEETS AGE & MC CRITERIA

- ❖ #10027988 - Dodge Pick-up
- ❖ 13 year old in 2015
(Acquired in 2002)
- ❖ Used 128,305 Miles, as of
FY 2015
- ❖ \$7,906 in Maintenance Cost
from FY 08 – FY 15



Overall Results of Analysis

- ❖ **Approximately \$977,000 needed to replace 13 vehicles/equipment**



Replacement Funding

Type	Vehicle / Equipment Description, Age & Estimated Miles / Hours in 2016	Avg. MC per Yr. (FY 13-15)	Budgeted For FY 16	Est. Funding Needed
Light	10027988 – Dodge 3/4T Pick-up; 14 yrs.; 138,175 miles	\$ 2,635	-	\$ 33,896
	10028599 – Dodge 3/4T Pick-up; 16 yrs.; 148,996 miles	2,343	-	36,888
Med. & Heavy	10028613 – Int’l 18 CY Dump Truck; 19 yrs.; 130,136 miles	3,811	-	112,877
	10028615	GMC 1.5T Utility Truck; 20 yrs.; 98,649 miles	1,142	\$ 95,000
		Welder for replacement vehicle		15,000
	10028616 – Ford 1.5T Utility Truck; 16 yrs.; 148,089 miles	2,941	-	59,797
Const.	10028595 – Gradall Excavator; 13 yrs.; 6,400 hours	22,454	-	228,619
	10027799 – Ford Backhoe; 21 yrs.; 2,308 hours (<i>Transferred to BCB from the Miami FS in 2015</i>)	1,573	-	61,296
Marine	10028246 – Aquamog Weed Harvester; 19 yrs., 4,291 hours	11,663	-	150,000
	10028597 – Aquamog Weed Harvester; 22 yrs., 16,001 hours	9,990	150,000	None
	10027812 – 20 Ft. Towboat; 26 yrs., 2,453 hours	12,656	-	131,871
Trailers	10028607 – Flatbed 20T Trailer; 19 yrs.	4,445	-	49,838
	10028610 & 10028608 – Boat Trailers; 17 yrs. & 12 yrs.	109	-	4,727
Totals		\$ 75,762	\$ 260,000	\$ 869,809
Do Not Meet Replacement Criteria but Should be Considered for Replacement				
10031777 – Ford Escape Hybrid; 10 yrs.; 105,293 miles – Battery will Need to be Replaced, Costs about \$7,500		2,300	-	32,751
10028614 – Ford Flatbed Truck; 17 yrs.; 122,343 miles; High MC		4,128	-	74,372
Totals		\$ 6,428	-	\$ 107,123
Funding Needed for Vehicle/Equipment Replacement			\$ 260,000	\$ 976,932

Maintenance Cost & Number of Fleet

Notes:

Increase of approx. \$40,000 from FY12 to FY13 primarily due to the following:

- ❖ #10028595 – Excavator – MC ↑ \$18,141
- ❖ #10028597 – Weed Harvester – MC ↑ \$9,034

Increase of six units from FY 12 to FY 13 due to four transfers from other FS and two acquisitions were made with capital funds

**BCB Maintenance Cost
Fiscal Years 2008 - 2015**



**BCB Fleet Inventory
Fiscal Years 2008 - 2015**



Maintenance Cost

- ❖ Approximately 54% of BCB's total fleet maintenance cost over the past three fiscal years was spent on the 13 of the 44 vehicles/equipment that meet replacement criteria

Maintenance Cost Analysis				
Fiscal Year	Total MC	Met Replacement Criteria		%
		No	Yes	
2013	\$ 131,230	\$ 66,812	\$ 64,418	49%
2014	142,210	51,484	90,726	64%
2015	139,432	70,436	68,996	49%
Total	\$ 412,872	\$ 188,732	\$ 224,140	54%

Other Effects of Deferred Replacement

- ❖ **Estimated replacement costs will continue to increase since additional vehicles/equipment will be up for replacement each year.**
- ❖ **Maintenance and repair costs will continue to increase and productivity will be impacted when vehicles / equipment are out of service for repairs.**

Recurring Annual Replacement Cost

- ❖ Approximately \$134,000 in recurring annual funding needed to replace vehicles/equipment

Annual Replacement Cost Analysis				
Class	Number in Class	Estimated Replacement Cost	Useful Life	Recurring Annual Budget Needs
Light Trucks	15	\$ 515,908	12 yrs.	\$ 42,992
Medium / Heavy Trucks	5	413,959	15 yrs.	27,597
Heavy Equipment	5	493,325	15 yrs.	32,888
Marine Equipment	6	595,260	15 yrs.	39,684
Trailers	6	83,191	15 yrs.	5,546
Total	37	\$ 2,101,643		\$ 148,707
Less: Estimated Asset Disposal Proceeds				\$ (14,869)
Net Recurring Annual Funding Need				\$ 133,838

Unit Transfers To/From SFWMD

Transfers to BCB								
Vehicle / Equipment Description	Acquisition			Date Transferred	Remaining Useful Life - Years	Depreciation		
	Date	Useful Life	Cost			From Transfer Date to FY 15	Remaining Depreciation	Total
<i>10028246 – Weed Harvester</i>	04/97	25 yrs.	\$ 211,843	05/13	9.08	\$ 9,175	\$ 25,310	\$ 34,485
<i>10028566 – Pick- up Truck</i>	03/06	10 yrs.	24,085	05/15	0.42	822	-	822
<i>10028153 – Utility Truck</i>	11/05	12 yrs.	32,895	06/13	4.25	4,874	4,004	8,878
<i>10028254 – Pick- up Truck</i>	08/05	10 yrs.	24,347	03/14	1.42	2,797	-	2,797
<i>10027988 – Pick- up Truck</i>	05/01	7 yrs.	23,989	06/13	-	-	-	-
<i>10027799 – Backhoe / Loader</i>	07/95	10 yrs.	36,495	04/15	-	-	-	-
<i>10027812 – Towboat</i>	09/90	15 yrs.	69,395	06/13	-	-	-	-
Totals			\$ 423,049			\$ 17,668	\$ 29,314	\$ 46,982
Transferred from BCB								
<i>10028609 – Airboat Trailer</i>	03/02	15 yrs.	\$ 3,015	05/14	1.83	\$ 286	\$ 84	\$ 370
Net Totals			\$ 420,034			\$ 17,382	\$ 29,230	\$ 46,612

Annual Depreciation for Transfers

Fiscal Year	Average Depreciation Per Year for Transferred Units
2013	\$ 2,276
2014	6,953
2015	8,151
2016	5,802
2017	5,711
2018	3,797
2019	3,797
2020	3,797
2021	3,797
2022	2,531
Total	\$ 46,612
Less Disposal Value*	\$ (42,003)
Net Impact	\$ 4,609

*Proceeds from disposals are credited to funding source used for initial asset acquisition.

Governing Board Discussion

? Questions ?