



# FAIRFAX COUNTY PARK AUTHORITY



## M E M O R A N D U M

**TO:** Chairman and Members  
Park Authority Board

**VIA:** Kirk W. Kincannon, Executive Director

**FROM:** Todd Brown, Director  
Park Operations Division

**DATE:** April 19, 2018

### *Agenda*

**Park Operations Committee**  
**Wednesday, April 25, 2018 – 5:30 p.m.**  
**Boardroom – Herrity Building**  
**Chairman: Linwood Gorham**  
**Vice Chair: Michael Thompson**  
**Members: Kiel Stone, Timothy Hackman, Faisal Khan**

1. Infrastructure – Forestry – Information (with presentation)\*

\*Enclosures



If accommodations and/or alternative formats are needed, please call (703) 324-8563. TTY (703) 803-3354

Board Agenda Item  
April 25, 2018

## **INFORMATION**

### Infrastructure Overview- Forestry (with presentation)

The Park Authority infrastructure includes natural resources; of which trees are highly valued components seen throughout the park system. Trees require maintenance like any other park asset.

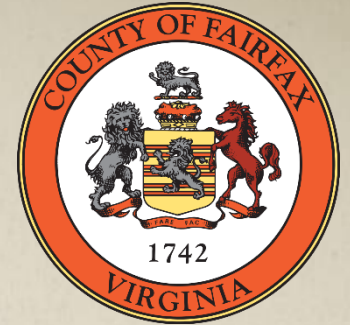
Staff will provide an overview of the current state of the Park Authority Forestry Operation, to include information on the impacts, trends, and challenges when managing the tree inventory. Staff will also share the history of funding for tree maintenance and the estimated funding requirements in order to achieve acceptable standards moving forward.

### ENCLOSED DOCUMENTS:

None

### STAFF:

Kirk W. Kincannon, Executive Director  
Sara Baldwin, Deputy Director/COO  
Aimee L. Vosper, Deputy Director/CBD  
Todd Brown, Director, Park Operations Division  
Barbara Nugent, Director, Park Services Division  
Cindy Walsh, Director, Resource Management Division  
Dave Bowden, Director, Planning and Development Division  
Todd Johnson, Director Golf Enterprises  
Janet Burns, Fiscal Administrator



# INFRASTRUCTURE OVERVIEW

**FORESTRY OPERATIONS – APRIL 25, 2018**

**PRESENTED BY SCOTT DIFFENDERFER ~ URBAN FORESTRY MANAGER**

# FORESTRY OPERATIONS

## INVENTORY STATUS

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- **780 MILES OF PARKLAND ABUTS PRIVATE PROPERTY – 80% FORESTED (624 MILES)**
- **23,491 ACRES OF PARKLANDS (427 PARKS)**
- **5,361 ACRES OF DEVELOPED PARKLAND, 18,130 UNDEVELOPED**
- **325 MILES OF TRAILS**
- **18 MILLION VISITORS YEARLY**
- **DECLINING FOREST – ASH (EMERALD ASH BORER); OAK (OAK DECLINE)**
  - **APPROXIMATELY 163,000 ASH TREES ON PARKLAND**
  - **APPROXIMATELY 228,260 WHITE OAKS ON PARKLAND**

# FORESTRY OPERATIONS

## *METRICS – RISK MATRIX (PRIORITY WORK)*

LIKELIHOOD OF FAILURE AND IMPACT	CONSEQUENCES			
	NEGLIGIBLE	MINOR	SIGNIFICANT	SEVERE
VERY LIKELY	Low	Moderate	High	Extreme
LIKELY	Low	Moderate	High	High
SOMEWHAT LIKELY	Low	Low	Moderate	Moderate
UNLIKELY	Low	Low	Low	Low











# FORESTRY OPERATIONS

## WHAT DO WE DO

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### WHAT WE CURRENTLY DO

- TREE REMOVAL (PRIORITY 1)
- TREE PRUNING (PRIORITY 1)
- TREE RISK INSPECTIONS
- WORK WITH OTHER OPERATIONS
  - NRMP (NATURAL RESOURCE MANAGEMENT PLAN)
  - PLANNING AND DEVELOPMENT
  - URBAN FORESTRY MANAGEMENT
  - AREA AND MOBILE CREWS
- INTERACT WITH COUNTY RESIDENTS TO REVIEW TREE COMPLAINTS

### WHAT WE CAN DO WITH FUNDING

- TREE REMOVAL (PRIORITY 1, 2, & 3)
- PRUNING (PRIORITY 1, 2, & 3)
- PREVENTATIVE TREE RISK ASSESSMENT
- SCHEDULED PARKLAND INSPECTIONS
- IPM PEST MANAGEMENT PROGRAM
- IMPLEMENTATION OF THE URBAN FORESTRY MANAGEMENT PLAN
- PREVENTATIVE AND MAINTENANCE PRUNING TREATMENTS
- IMPLEMENTATION OF FCPA FORESTRY OPERATIONS MANAGEMENT PLAN
- IMPLEMENTATION OF PROPOSED STAFFING REALIGNMENT

# FORESTRY OPERATIONS

## BENEFITS TO THE COMMUNITY

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### CURRENT FUNDING LEVEL

- **REACTIVELY:**
  - RESPOND TO CITIZEN CALLS
  - REMOVE HIGH/EXTREME RISK TREES
  - PRUNE AS NECESSARY
- **RESPONSE TIMES FOR:**
  - CITIZEN CALLS FOR INSPECTIONS- 13 BUSINESS DAYS
  - WORK COMPLETION- 40 BUSINESS DAYS (PRIORITY 1 LEVEL WORK ONLY)

### WITH ADDITIONAL FUNDING

- **PROACTIVELY MANAGE TO IMPROVE THE HEALTH OF THE FORESTS, HEALTHY FORESTS WILL:**
  - FILTER WATER
  - PROTECT SOIL FROM EROSION
  - IMPROVE AIR QUALITY
  - PROVIDE HABITAT FOR WILDLIFE
- **PREVENTION:**
  - INSPECT PARKS FOR TREE RISK
  - PRUNE & REMOVE ANY TREE RISK
  - ROUTINE MAINTENANCE PRUNING
- **IMPROVE RESPONSE TIME:**
  - CITIZEN CALLS FOR INSPECTIONS
  - WORK COMPLETION RATES



**FORESTRY OPERATIONS CREW AT POD SHOWCASE AT THE NIKE MISSILE SITE FEBRUARY 22, 2017**











# FORESTRY OPERATIONS

## *EMERALD ASH BORER IN FAIRFAX COUNTY*



# FORESTRY OPERATIONS

## OAK DECLINE IN FAIRFAX COUNTY

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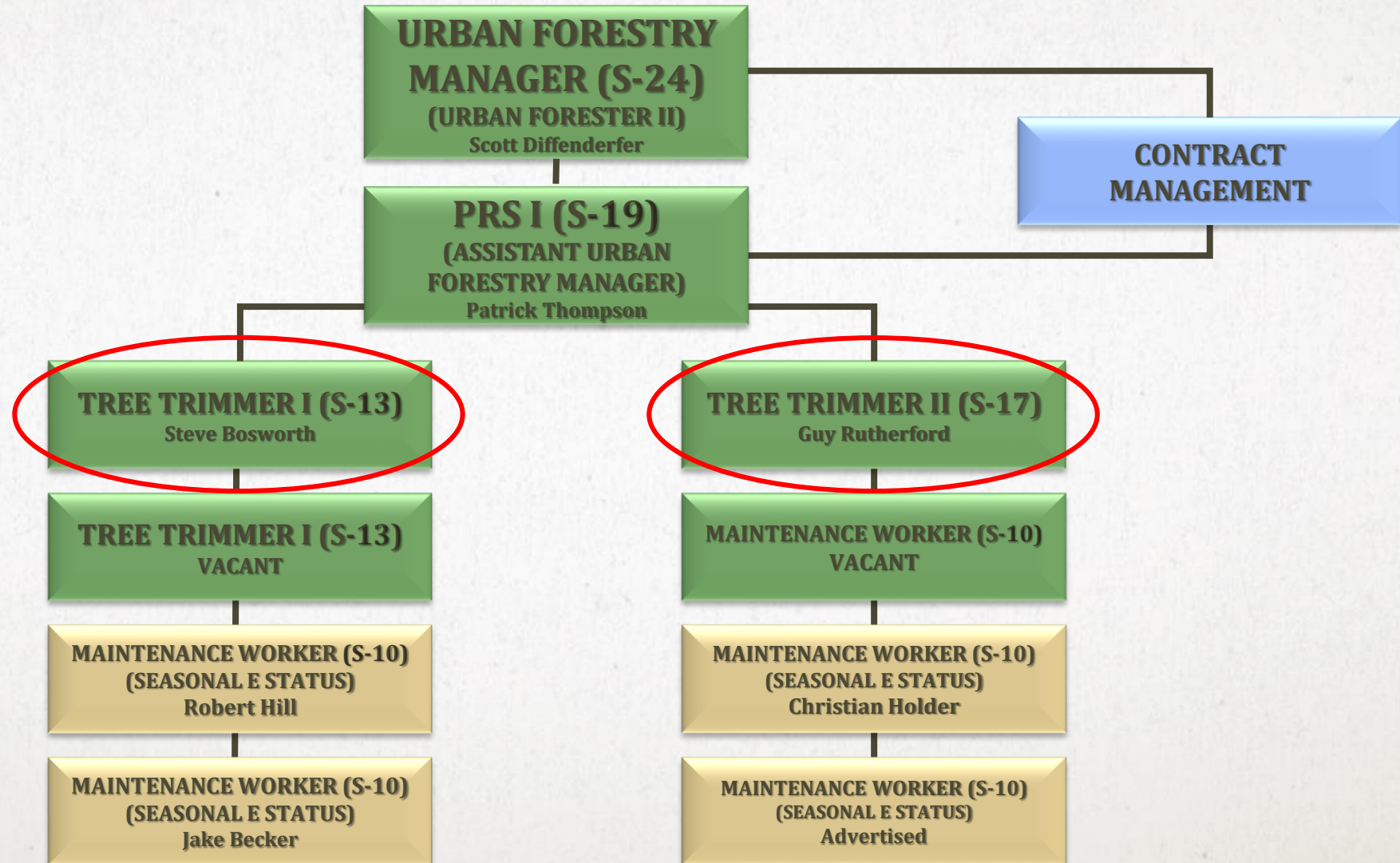


*Crown dieback is the first visible symptom of oak decline. This white oak is clearly showing signs of decline.*



# FORESTRY OPERATIONS

## *WORK FORCE (CURRENT)*



# FORESTRY OPERATIONS

## *BUDGET (EXPENSE REVIEW)*

FY	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Contract Budget</b>	\$63,500	\$63,500	\$63,500	\$63,500	\$63,500	\$63,500	\$63,500	\$276,400	\$276,400
<b>Contract (actual)</b>	\$39,969	\$39,153	\$41,131	\$237,290	\$204,505	\$309,380	\$210,465	\$481,255	<i>\$525,000 (projected)</i>
<b>Difference of Total Budgeted and Spent</b>	\$23,531	\$24,347	\$22,369	<b>\$173,790</b>	<b>\$141,005</b>	<b>\$245,880</b>	<b>\$146,965</b>	<b>\$204,855</b>	<b>\$248,600</b>

# FORESTRY OPERATIONS

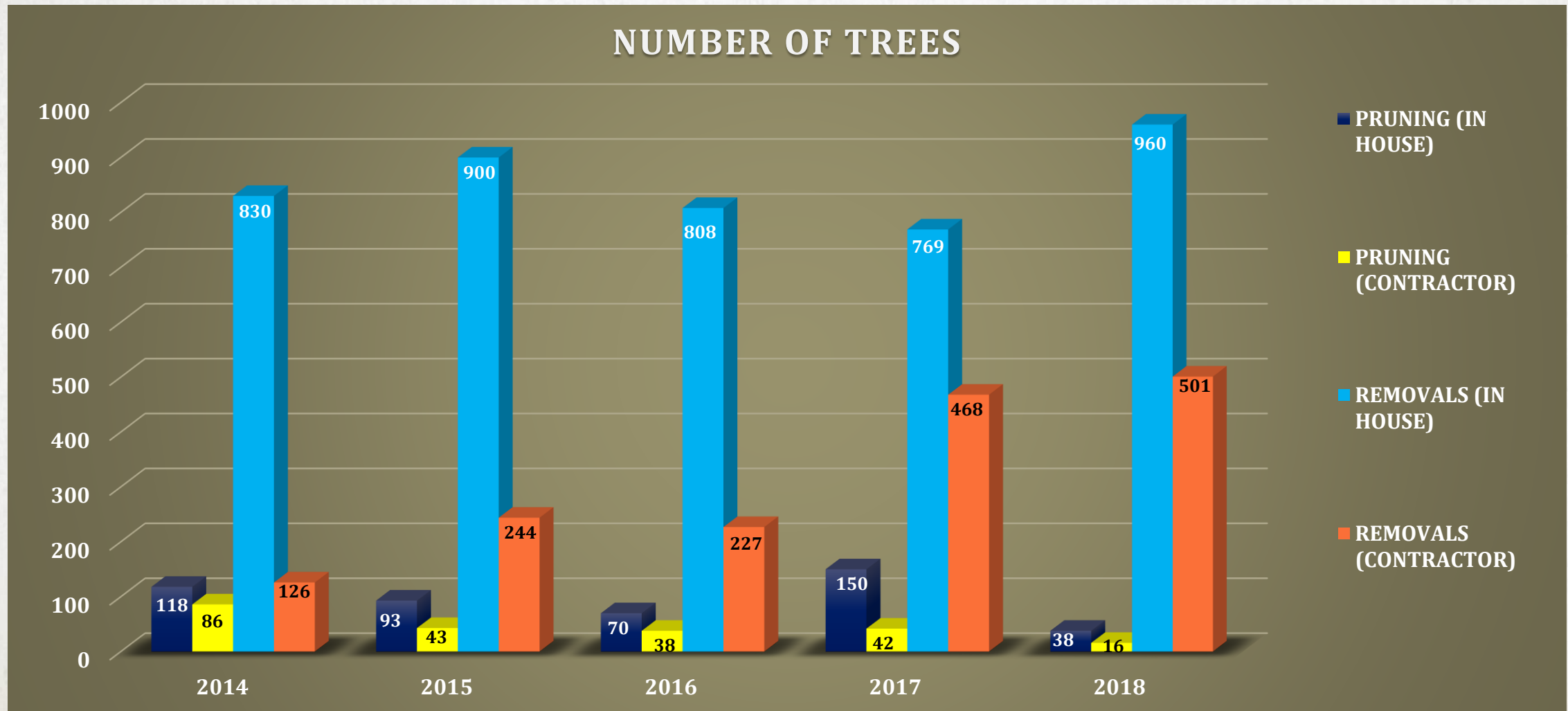
## ***BUDGET*** (DEFERRED EXPENSES TO COVER FORESTRY OPERATIONS)

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AMENITY	VALUE OF \$1.16 M
OUTDOOR RESTROOM	23 RENOVATIONS
PICNIC SHELTER	23 RENOVATIONS
PLAYGROUND	232 MULCH REPLACEMENTS
TENNIS COURT	26 RENOVATIONS
TRAIL	1,060 MILES MAINTAINED

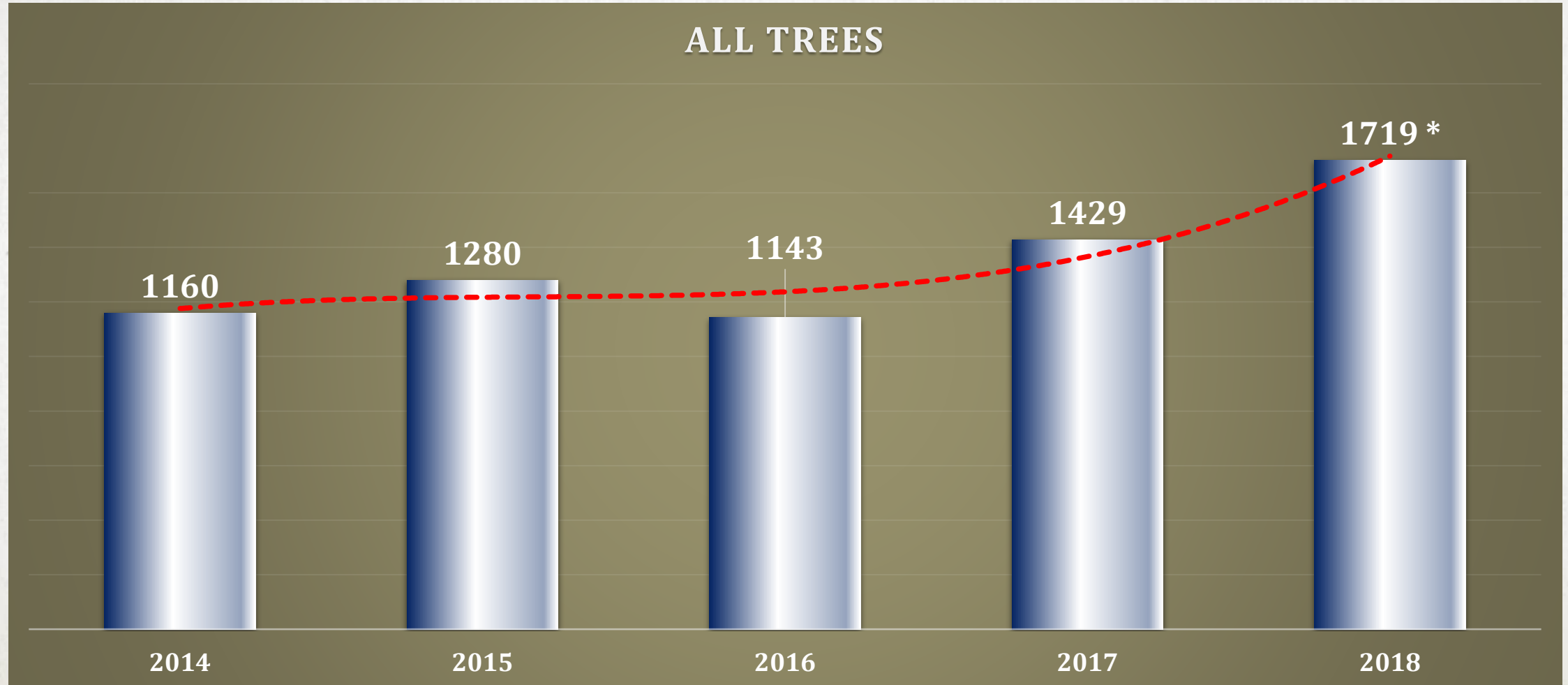
# FORESTRY OPERATIONS

## *METRICS – WORK CONTRACTED COMPARED TO IN-HOUSE*



# FORESTRY OPERATIONS

## ***METRICS – TOTAL OF TREES PRUNED AND/OR REMOVED***



**\* Please note the value for FY 2018 are projected through 6/30/18**

# FORESTRY OPERATIONS

## *BUDGET (COMPARISON – FY 2018)*

Comparison to Other Local Jurisdiction	Inventory	Staffing	Total Budget	Population 2015
<b>Arlington County</b>	1,000 Acres 19,500 street trees	3 Certified Arborist + 8 Field Staff	\$978,000	229,164
<b>City of Alexandria</b>	1,000 Acres ~ 20,000 trees as of FY18*	3 Certified Arborists Field work all contract	\$1,326,284	153,511
<b>FCPA</b>	23,491 Acres	2 Certified Arborists + 4/6 Field Staff, FTE	\$667,000	1,142,000

\* ALEXANDRIA IS 3 YEARS IN ON THEIR 5 YEAR TREE INVENTORY



# FORESTRY OPERATIONS

## ***BUDGET*** (COMPARISON WITH NATIONAL AVERAGE)

Local Jurisdiction	\$\$ spent per Resident	Total Budget	Budget at National Per Capita Rate of \$7.17*
Arlington County	\$4.35	\$978,000	\$1,612,500
City of Alexandria	\$8.64	\$1,326,284	\$1,100,674
FCPA	\$0.58	\$667,000	\$8,188,140

**CURRENTLY, FOR EVERY \$10.50 OF TAX REVENUE, FCPA FORESTRY OPERATIONS RECEIVES \$0.01**

*\* Based on the Hauer report "Municipal Tree Care and Management in the United States: A 2014 Urban & Community Forestry Census of Tree Activities"*

# FORESTRY OPERATIONS

## ***METRICS – RESIDENT CALLS***

TYPES OF CALLS	CUSTOMER SERVICE REQUEST BY FY							
	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Fiscal Year</b>								
<b>Athletic Courts</b>	23	22	29	44	35	25	26	17
<b>Athletic Fields</b>	0	4	8	18	10	7	4	2
<b>Encroachment</b>	32	19	27	23	19	35	46	52
<b>General Park/Maintenance</b>	84	151	193	156	139	115	130	134
<b>Mowing</b>	5	12	15	18	18	10	14	15
<b>Trash</b>	52	53	50	43	36	26	13	29
<b>Tree</b>	461	499	404	642	401	366	444	592
<b>Vandalism</b>	19	11	15	14	16	8	14	26
<b>Totals:</b>	676	771	741	958	674	592	691	867

70% of Park Operations calls received centrally in Fy18 are tree or forestry related

# FORESTRY OPERATIONS

## ***METRICS – YTD (FY18) WORK REQUESTS FROM ALL SOURCES***

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- **TOTAL (TO DATE) TREE CALLS = 644**
- **393 OF THESE CALLS ARE CLOSED**
- **251 CALL ARE CONSIDERED ACTIVE, THIS INCLUDES:**
  - **WORK ORDERS AWAITING SCHEDULING**
  - **PROPERTY INSPECTIONS IN PROGRESS**
  - **PROPERTY INSPECTIONS TO BE SCHEDULED FOR REVIEW (I.E. WE HAVE NOT YET BEEN ON SITE TO INSPECT)**
  - **WORK ORDERS THAT ARE PRIORITY 2 OR 3...NOT SCHEDULED DUE TO VOLUME OF PRIORITY 1 WORK.**



Storm





# FORESTRY OPERATIONS

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# FORESTRY OPERATIONS

## *NEEDS – CREW SIZE / EQUIPMENT*

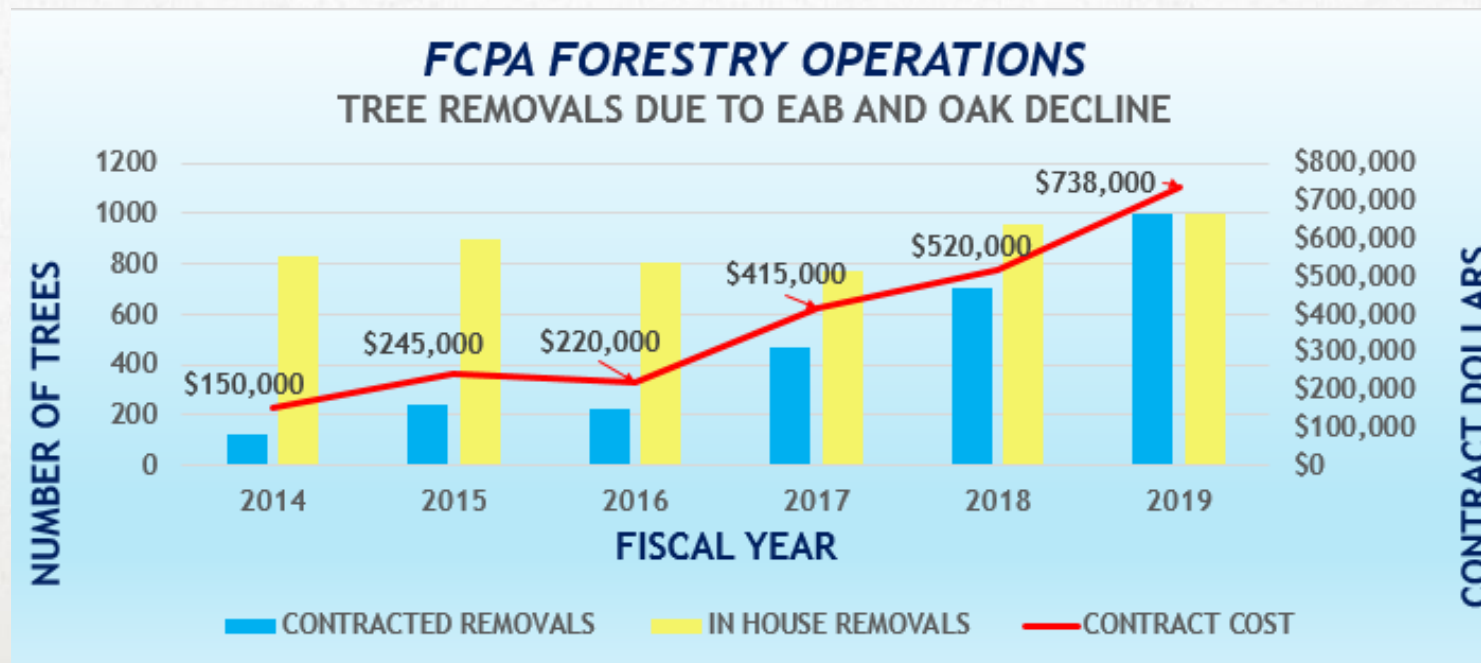
YEAR	CREW SIZE		CAPITAL EQUIPMENT ASSETS	BUDGET
	FULLTIME	SEASONAL		
2018	4	3	6 UNITS + SUPPORT EQUIPMENT	\$767,000
2023	12	2	9 UNITS + SUPPORT EQUIPMENT	\$2,197,166

- **A \$2.2M BUDGET WILL COVER:**
  - **INCREASED STAFFING**
  - **INCREASED CONTRACT WORK**
  - **ADDITIONAL AND REPLACEMENT CAPITAL EQUIPMENT**



# FUNDING SUMMARY

- FY18 request- \$570,000
- FY19 request- \$687,000
- FY20 request- \$796,000 (proposed)
- FY18 adopted - \$276,424
- FY19 adopted - \$276,424



# EXPLORING FUNDING OPPORTUNITY

- Meeting held on March 19<sup>th</sup>, 2018:
  - DPWES-Urban Forestry
  - Dept. of Management & Budget
  - Office of the County Attorney &
  - Park Authority
- Urban Forestry Pest Management funding annual surplus over \$1M.
- Discussion on FCPA utilizing the fund to address Emerald Ash Borer infested Ash trees.
- FCPA funds being overspent.
  - Deferred maintenance on park infrastructure, including tree maintenance and removal.



# **FORESTRY OPERATIONS**

## ***NEEDS– GOALS AND OBJECTIVES WITH ADEQUATE RESOURCES***

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- **STAFFING (3 CREWS)**
  - **TREE RISK**
- **PARK INSPECTIONS**
  - **IPM**
  - **NRP**
- **LIABILITY**





THANK  
YOU!