



WEST VIRGINIA  
**DIVISION OF  
NATURAL  
RESOURCES**  
ANNUAL REPORT  
2014-2015





324 4th Avenue  
South Charleston, West Virginia 25303

Telephone: 304-558-2754  
Fax: 304-558-2768

**Web sites:**

[www.wvdnr.gov](http://www.wvdnr.gov)  
[www.wvstateparks.com](http://www.wvstateparks.com)  
[www.wvhunt.com](http://www.wvhunt.com)  
[www.wvfish.com](http://www.wvfish.com)  
[www.wonderfulwv.com](http://www.wonderfulwv.com)

**Electronic mail:**

[DNR.LandAndStreams@wv.gov](mailto:DNR.LandAndStreams@wv.gov)  
[DNR.Law@wv.gov](mailto:DNR.Law@wv.gov)  
[DNR.Parks@wv.gov](mailto:DNR.Parks@wv.gov)  
[DNR.Wildlife@wv.gov](mailto:DNR.Wildlife@wv.gov)



**Earl Ray Tomblin**  
Governor, State of West Virginia

**J. Keith Burdette**  
Secretary, Department of Commerce

**Robert A. Fala**  
Director, Division of Natural Resources

**Emily J. Fleming**  
Assistant to the Director / Legislative Liaison

**Bryan M. Hoffman**  
Executive Secretary, Administration Section

**Col. Jerry B. Jenkins**  
Chief, Law Enforcement Section

**Samuel A. England**  
Chief, Parks and Recreation Section

**Paul R. Johansen**  
Chief, Wildlife Resources Section

**Joe T. Scarberry**  
Supervisor, Land and Streams

**Natural Resources Commissioners**

Jeffrey S. Bowers, *Sugar Grove*  
Gregory K. Burnette, *Elkview*  
Byron K. Chambers, *Romney*  
Peter L. Cuffaro, *Wheeling*  
Thomas O. Dotson, *White Sulphur Springs*  
David M. Milne, *Bruceston Mills*  
Kenneth R. Wilson, *Chapmanville*

The West Virginia Division of Natural Resources Annual Report 2014-2015 is published by the Division of Natural Resources and the Department of Commerce Communications.

It is the policy of the Division of Natural Resources to provide its facilities, services, programs and employment opportunities to all persons without regard to sex, race, age, religion, national origin or ancestry, disability, or other protected group status.

# Foreword

## LETTER FROM THE DIRECTOR



### DIVISION OF NATURAL RESOURCES

324 4th Avenue, Room 342  
South Charleston, WV 25303-1228  
Telephone (304) 558-2754  
Fax (304) 558-2768  
TDD (304) 558-1439  
TDD (800) 354-6087

Earl Ray Tomblin  
Governor

Robert A. Fala  
Director

December 1, 2015

The Honorable Earl Ray Tomblin  
Governor of West Virginia  
State Capitol  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305

Dear Governor Tomblin:

Transmitted herewith is the annual report for the West Virginia Division of Natural Resources for fiscal year July 1, 2014, through June 30, 2015.

This report contains a summary of the activities and projects undertaken by the Division in the fulfillment of its legal responsibilities of managing the state's renewable natural resources.

A detailed accounting of receipts and expenditures as prescribed by Chapter 20, Code of West Virginia, is also respectfully submitted.

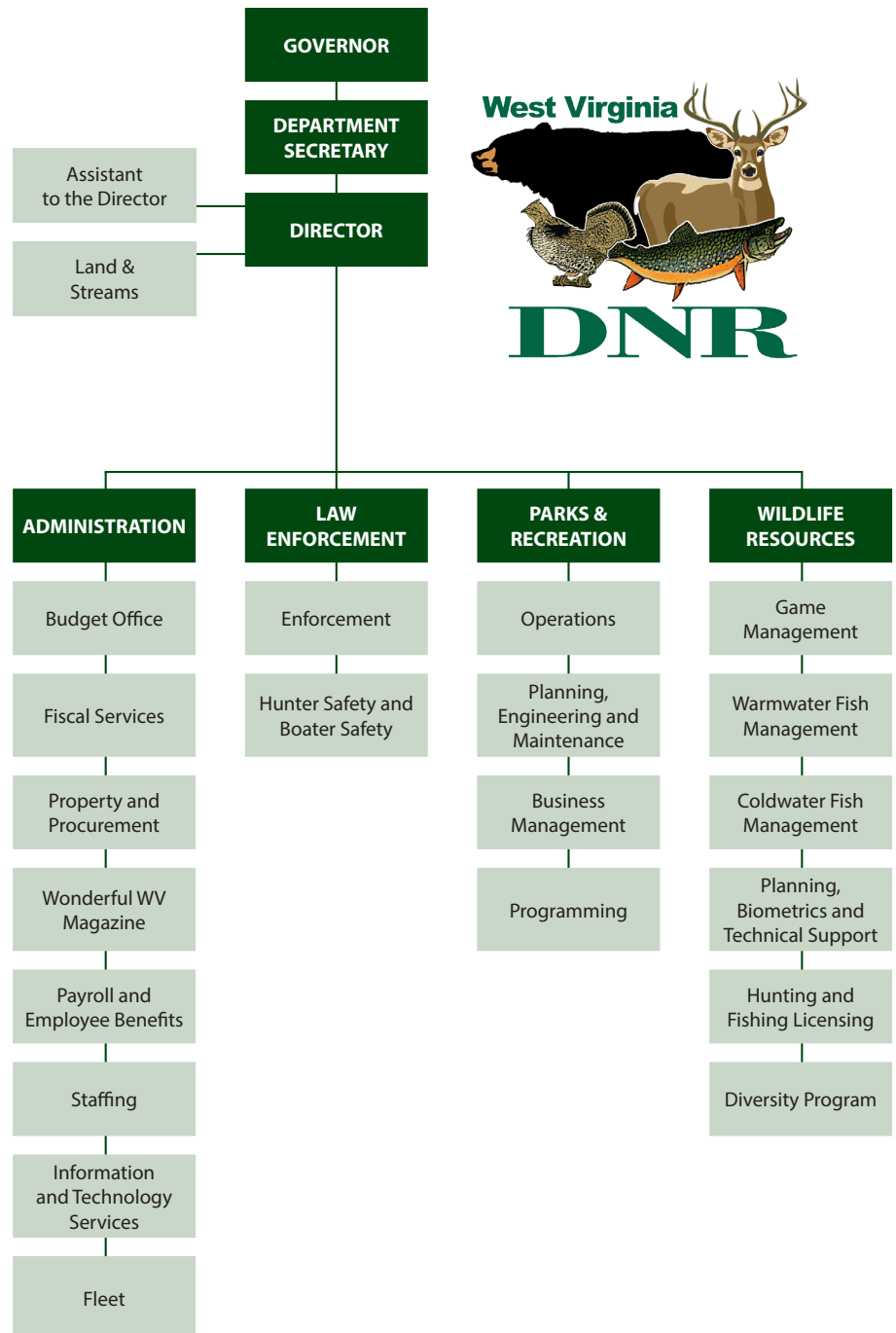
Sincerely,

A handwritten signature in blue ink that reads "BOB FALA".

Robert A. Fala  
Director

RF:vmt

## DNR ORGANIZATIONAL CHART



## **MISSION STATEMENT**

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It is the statutory mission of the West Virginia Division of Natural Resources to provide and administer a long-range comprehensive program for the exploration, conservation, development, protection, enjoyment and use of the natural resources of the State of West Virginia.

## **BOARDS AND COMMISSIONS ON WHICH THE DIRECTOR SERVES**

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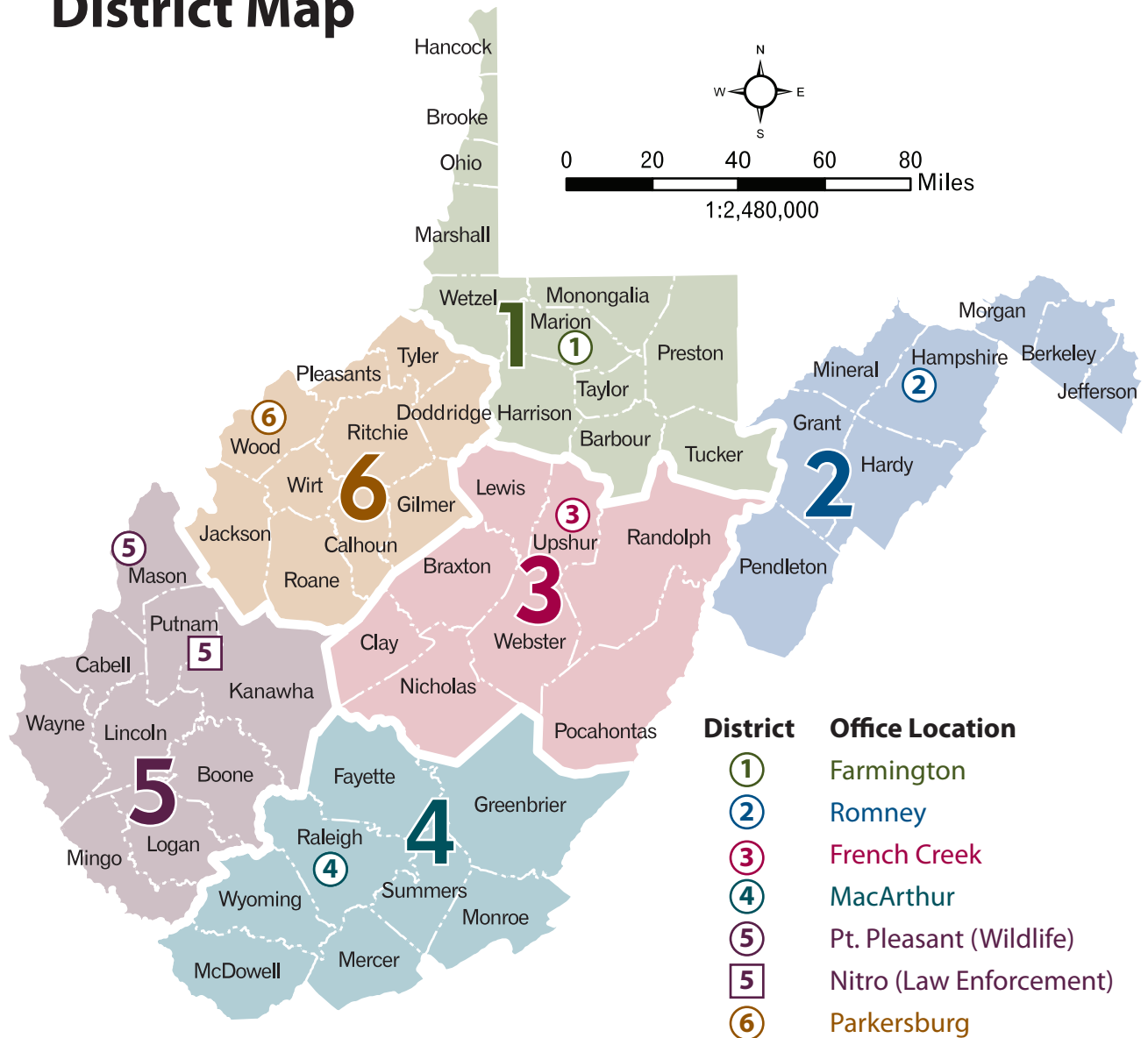
- West Virginia Natural Resources Commission
- Wildlife Endowment Fund Board of Trustees
- West Virginia Public Land Corporation
- West Virginia Whitewater Commission
- West Virginia Tourism Commission
- West Virginia Outdoor Heritage Conservation Fund
- National Coal Heritage Area Authority

## **EEOC STATEMENT**

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It is the policy of the Division of Natural Resources to provide its facilities, services, programs, and employment opportunities to all persons without regard to sex, race, age, religion, national origin, or ancestry, disability, or other protected group status. — *September 2005*

# West Virginia Division of Natural Resources District Map





# West Virginia Division of Natural Resources Wildlife Management Areas

## District 1 304-825-6787

1. Bear Rocks Lake
2. Burches Run
3. Castlemans Run Lake
4. Cecil H. Underwood
5. Center Branch
6. Cheat Canyon
7. Cross Creek
8. Dents Run
9. Dunkard Fork
10. Fairfax Pond-Rehe Lake
11. Hillcrest
12. Lantz Farm and Nature Preserve
13. Lewis Wetzel
14. Little Canaan
15. Little Indian Creek
16. Pedlar
17. Pleasant Creek
18. Pruntytown State Farm
19. Snake Hill
20. Teter Creek
21. Upper Deckers Creek

## District 3 304-924-6211

34. Becky Creek
35. Big Ditch
36. Burnsville Lake
37. Elk River
38. Handley
39. Huttonsville
40. Slatyfork
41. Smoke Camp
42. Stonecol Lake
43. Stonewall Jackson Lake
44. Summersville Lake
45. Valley Bend
46. Wallback

## District 5 304-675-0871

60. Amherst/Plymouth
61. Beech Fork Lake
62. Big Ugly
63. Chief Cornstalk
64. Chief Logan
65. East Lynn Lake
66. Elk Creek
67. Green Bottom
68. Hilbert
69. Laurel Lake
70. McClintic
71. Mill Creek
72. Morris Creek
73. Upper Mud River

## District 6 304-420-4550

74. Buffalo Run
75. Conaway Run Lake
76. Elk Fork Lake
77. Frozen Camp
78. Hughes River
79. O'Brien Lake
80. Ritchie Mines
81. Rollins Lake
82. Sand Hill
83. Stumptown
84. The Jug
85. Turkey Run
86. Woodrum Lake

## National Forests

### Monongahela WMAs

- I. Beaver Dam
- J. Blackwater
- K. Cheat
- M. Cranberry
- N. Little River
- O. Neola
- P. Otter Creek
- Q. Potomac
- S. Rimel
- U. Tea Creek

### George Washington WMAs

- L. Cove Creek
- T. Shenandoah
- V. Wardensville

### Jefferson WMAs

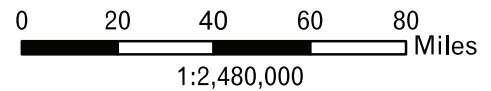
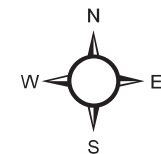
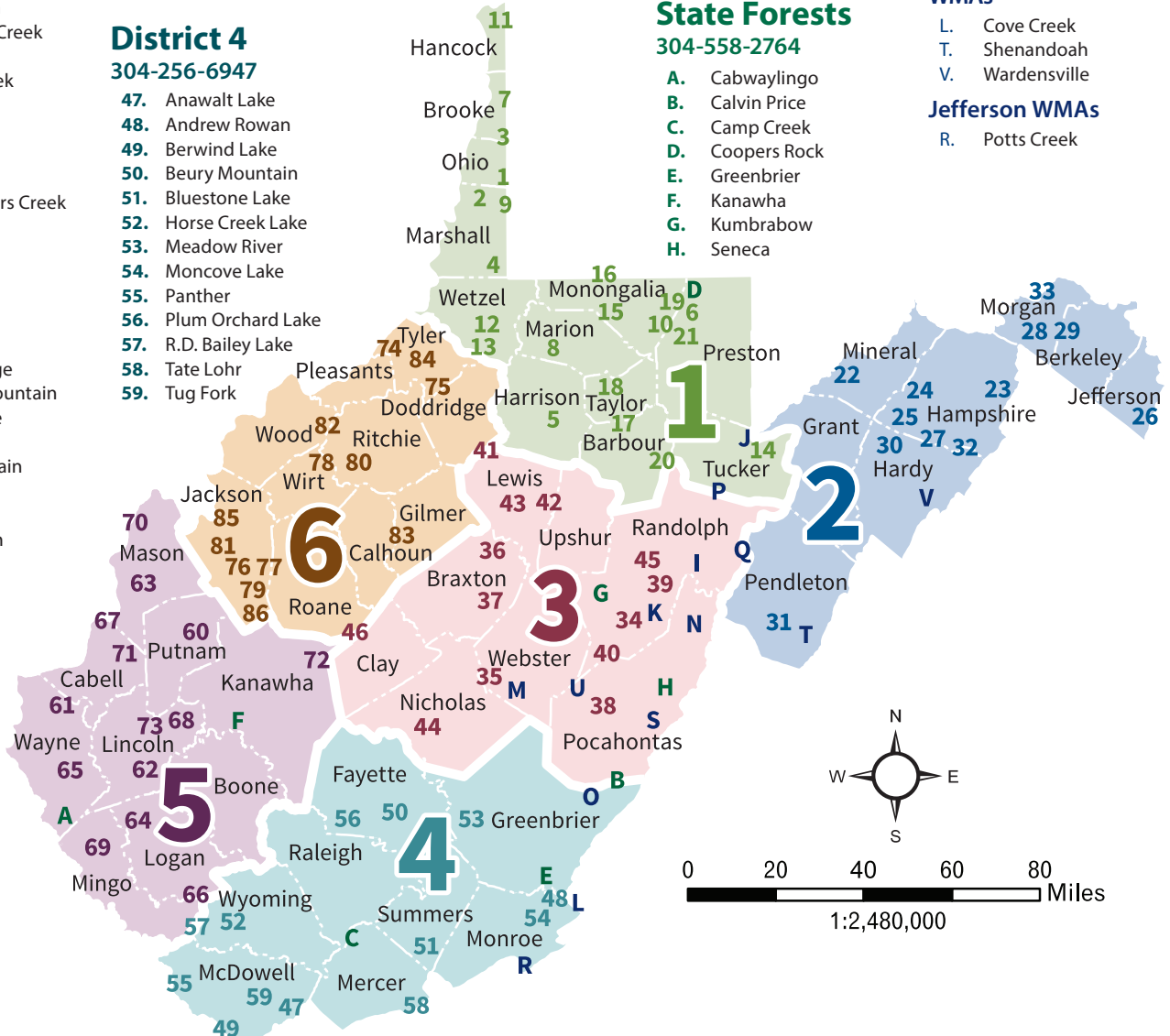
- R. Potts Creek

## District 4 304-256-6947

47. Anawalt Lake
48. Andrew Rowan
49. Berwind Lake
50. Beury Mountain
51. Bluestone Lake
52. Horse Creek Lake
53. Meadow River
54. Moncove Lake
55. Panther
56. Plum Orchard Lake
57. R.D. Bailey Lake
58. Tate Lohr
59. Tug Fork

## District 2 304-822-3551

22. Allegheny
23. Edwards Run
24. Fort Mill Ridge
25. Nathaniel Mountain
26. Shannondale Springs
27. Short Mountain
28. Sideling Hill
29. Sleepy Creek
30. South Branch
31. Thorn Creek
32. Warden Lake
33. Widmeyer





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# Administration

The administrative offices provide services to all sections and offices of the Division of Natural Resources in the areas of budgeting, accounting, investments, staffing, payroll, employee benefits, procurement, property management and control, general services, computer application development and maintenance, and publishing Wonderful West Virginia magazine.

Sectional responsibilities include developing and maintaining sound fiscal and personnel policies; coordinating purchasing procedures; maintaining active inventory and records management programs; managing a statewide radio communication system; publishing the state's premier magazine; coordinating, developing, and maintaining mainframe and local network program applications; and developing administrative procedures required for the orderly correlation of divisional activities and the overall operation of the division. The services are provided by employees working in seven major branches: staffing, payroll and employee benefits, procurement and property management, fiscal services, budget, information technology, and Wonderful West Virginia magazine.



## Administration Section

Bryan Hoffman,  
*Executive Secretary*

## WONDERFUL WEST VIRGINIA MAGAZINE

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*Wonderful West Virginia* is an official publication of the West Virginia Division of Natural Resources and is the state's premier publication. Published monthly, there were approximately 30,992 copies printed of each issue.

In FY 2015 the average number of copies mailed each month to paid individual subscribers was 25,576. In addition, some 1,682 copies were distributed each month to paid bulk subscribers such as government agencies, chambers of commerce, motels, real estate firms, gift shops in state parks, and other newsstand distributors.

## STATEMENT OF DISBURSEMENTS

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The following report is limited to a presentation of the fiscal operations of the West Virginia Division of Natural Resources for the year ending June 30, 2015. Itemization of summarized financial data contained in this report is public and on file.

# Statement of Disbursements

## ADMINISTRATION SECTION

### EXECUTIVE/ADMINISTRATIVE

Personal Services	\$	313,201.23
Employee Benefits		98,857.47
Current Expenses		677,783.69
Repairs & Alterations		709.26
Equipment		6,882.74
Fund Transfer		590,000.00
<b>TOTAL</b>	<b>\$</b>	<b>1,687,434.39</b>

### FISCAL SERVICES

Personal Services	\$	595,038.98
Employee Benefits		214,767.04
Current Expenses		857,074.99
Repairs & Alterations		2,015.26
PEIA Transfer		15,826.00
<b>TOTAL</b>	<b>\$</b>	<b>1,684,722.27</b>

### STAFFING/PAYROLL

Personal Services	\$	232,588.04
Employee Benefits		89,325.00
Current Expenses		27,935.46
<b>TOTAL</b>	<b>\$</b>	<b>349,848.50</b>

### GENERAL SERVICES

Personal Services	\$	347,532.20
Employee Benefits		129,192.95
Current Expenses		192,822.41
Repairs & Alterations		22,011.77
Equipment		89.99
<b>TOTAL</b>	<b>\$</b>	<b>691,649.32</b>

### WONDERFUL WEST VIRGINIA MAGAZINE

Personal Services	\$	35,517.80
Employee Benefits		17,329.58
Current Expenses		473,855.09
<b>TOTAL</b>	<b>\$</b>	<b>526,702.47</b>

General Revenue Appropriated	\$	2,313,640.33
Special Revenue Non-Appropriated		1,088,142.40
Special Revenue Appropriated		1,473,845.63
Federal Revenue Appropriated		64,728.59
<b>TOTAL ADMINISTRATION</b>	<b>\$</b>	<b>4,940,356.95</b>

## LAW ENFORCEMENT SECTION

### LAW ENFORCEMENT

Personal Services	\$	5,484,806.33
Employee Benefits		2,202,215.93
Current Expenses		1,993,456.55
Repairs & Alterations		103,886.12
Equipment		168,825.27
PEIA Transfer		17,377.00
Medical Service Payments		8,440.25
<b>TOTAL</b>	<b>\$</b>	<b>9,979,007.45</b>

General Revenue Appropriated	\$	2,911,380.92
Special Revenue Non-Appropriated		978,961.12
Special Revenue Appropriated		5,252,462.11
Federal Revenue Appropriated		836,203.30
<b>TOTAL LAW ENFORCEMENT</b>	<b>\$</b>	<b>9,979,007.45</b>

## WILDLIFE RESOURCES SECTION

### GAME MANAGEMENT

Personal Services	\$	2,594,930.26
Employee Benefits		1,023,728.71
Current Expenses		1,183,164.37
Repairs & Alterations		226,824.73
Equipment		270,873.76
Medical Service Payments		25.00
PEIA Transfer		543.00
Building Improvements		50,438.18
Land Improvements		10,259.53
<b>TOTAL</b>	<b>\$</b>	<b>5,360,787.54</b>

### CAPITAL IMPROVEMENTS

Personal Services	\$	222,659.83
Employee Benefits		37,469.23
Current Expenses		270,007.03
Repairs & Alterations		60,418.65
Building Improvements		10,550.00
Land Improvements		62,971.51
Land Purchases		593,300.00
Contractor Pmts for Capital Asset Proj		274,982.00
Consultant Pmts for Capital Asset Proj		19,647.20
<b>TOTAL</b>	<b>\$</b>	<b>1,552,005.45</b>

# Statement of Disbursements

## COLD WATER FISH MANAGEMENT

Personal Services	\$ 1,084,196.93
Employee Benefits	492,514.73
Current Expenses	909,410.16
Repairs & Alterations	80,132.03
Equipment	462,967.07
<b>TOTAL</b>	<b>\$ 3,029,220.92</b>

## WILDLIFE - ADMINISTRATION

Personal Services	\$ 442,669.89
Employee Benefits	170,094.30
Current Expenses	2,219,163.41
Repairs & Alterations	10,155.44
Equipment	42,882.96
<b>TOTAL</b>	<b>\$ 2,884,966.00</b>

## WARM WATER FISH MANAGEMENT

Personal Services	\$ 1,058,003.12
Employee Benefits	435,275.27
Current Expenses	603,014.84
Repairs & Alterations	61,185.95
Equipment	59,607.50
Land Improvements	6,786.83
<b>TOTAL</b>	<b>\$ 2,223,873.51</b>

## TECHNICAL SUPPORT

Personal Services	\$ 416,843.92
Employee Benefits	179,694.31
Current Expenses	186,986.48
Repairs & Alterations	2,065.39
<b>TOTAL</b>	<b>\$ 785,590.10</b>

## SPECIAL PROJECTS

Personal Services	\$ 261,472.25
Employee Benefits	94,556.19
Current Expenses	143,264.36
Repairs & Alterations	16,986.38
<b>TOTAL</b>	<b>\$ 516,279.18</b>

## WILDLIFE DIVERSITY

Personal Services	\$ 732,454.93
Employee Benefits	308,345.32
Current Expenses	405,764.01
Repairs & Alterations	2,893.07
Equipment	119.95
<b>TOTAL</b>	<b>\$ 1,449,577.28</b>

### HUNTING & FISHING LICENSE UNIT

Personal Services	\$	147,594.11
Employee Benefits		56,650.52
Current Expenses		198,814.91
Repairs & Alterations		58.29
<b>TOTAL</b>	<b>\$</b>	<b>403,117.83</b>

### ELKINS OPERATIONS CENTER

Personal Services	\$	134,063.95
Employee Benefits		71,223.61
Current Expenses		128,599.88
Repairs & Alterations		18,327.86
Equipment		48,239.50
<b>TOTAL</b>	<b>\$</b>	<b>400,454.80</b>

### WEST VIRGINIA WILDLIFE CENTER

Personal Services	\$	178,673.84
Employee Benefits		55,328.25
Current Expenses		73,600.48
Repairs & Alterations		18,419.41
<b>TOTAL</b>	<b>\$</b>	<b>326,021.98</b>

General Revenue Appropriated	\$	168,300.21
Special Revenue Non-Appropriated		4,518,589.55
Special Revenue Appropriated		6,979,778.59
Federal Revenue Appropriated		7,265,226.24
<b>TOTAL WILDLIFE RESOURCES</b>	<b>\$</b>	<b>18,931,894.59</b>

## PARKS & RECREATION SECTION

### PARKS & RECREATION

Personal Services	\$	17,295,936.52
Employee Benefits		6,113,572.29
Current Expenses		12,391,513.51
Repairs & Alterations		1,898,664.03
Equipment		76,943.46
PEIA Transfer		93,802.00
Building Improvements		32,161.91
Contractor Pmts for Capital Asset Proj		4,845,530.94
Consultant Pmts for Capital Asset Proj		796,056.79
Medical Service Payments		2,092.35
<b>TOTAL</b>	<b>\$</b>	<b>43,546,273.80</b>

General Revenue Appropriated	\$	14,204,172.35
Special Revenue Non-Appropriated		19,633,618.20
Special Revenue Appropriated		9,708,483.25
Federal Revenue Appropriated		0.00
<b>TOTAL PARKS &amp; RECREATION</b>	<b>\$</b>	<b>43,546,273.80</b>

## SPECIAL PROGRAMS & SERVICES SECTION

### OFFICE OF LAND & STREAMS

Personal Services	\$	247,768.87
Employee Benefits		86,098.27
Current Expenses		70,863.35
Repairs & Alterations		100.00
Equipment		102,549.65
PEIA Transfer		1,357.00
Land Purchases		12,000.00
<b>TOTAL</b>	<b>\$</b>	<b>520,737.14</b>

Special Revenue Non-Appropriated	\$	85,400.92
Special Revenue Appropriated		435,336.22
<b>TOTAL SPECIAL PROGRAMS &amp; SERVICES</b>	<b>\$</b>	<b>520,737.14</b>

Grand Total General Revenue Appropriated	\$	19,597,493.81
Grand Total Special Revenue Non-Appropriated		26,304,712.19
Grand Total Special Revenue Appropriated		23,849,905.80
Grand Total Federal Revenue Appropriated		8,166,158.13

**GRAND TOTAL DISBURSEMENTS** **\$ 77,918,269.93**



# Statement of Revenues/Disbursements

## COMBINING STATEMENT OF REVENUES, DISBURSEMENTS AND CHANGES IN CASH BALANCES FISCAL YEAR 2014-2015

### APPROPRIATED FUNDS

#### GENERAL FUND (0265)

Appropriated Fund - No Cash Balance

#### DISBURSEMENTS

Personal Services	(13,075,966.11)	
Employee Benefits	(4,766,031.59)	
Current Expense	(676,151.32)	
Repairs and Alterations	(25.98)	
Equipment	(162,537.00)	
Contractor Pmts for Capital Asset Proj	(212,112.94)	
Consultant Pmts for Capital Asset Proj	(8,222.40)	
PEIA Reserve Transfer	(101,353.00)	
WV OPEB Contribution	(595,093.47)	
<b>TOTAL DISBURSEMENTS</b>		<b>(19,597,493.81)</b>

#### SPECIAL REVENUE LICENSE FUND (3200)

Cash Balance July 1, 2014	2,629,046.89
Investment Balance July 1, 2014	6,460,795.95
Beginning Fund Balance	9,089,842.84

#### RECEIPTS

Animal Replacement Costs	33,799.90	
Contract Reimbursement	17,762.88	
Hunting & Fishing Licenses and Stamps	12,205,295.01	
Insurance Payments	240,665.00	
Investment Earnings	9,173.94	
Lifetime Senior Licenses	19,592.00	
Miscellaneous Permits and License	6,406.00	
Miscellaneous Collections	11,615.76	
Surplus Property Sale	55,618.00	
<b>TOTAL RECEIPTS</b>		<b>12,599,928.49</b>

#### DISBURSEMENTS

Personal Services	(4,896,142.38)	
Employee Benefits	(1,871,838.79)	
Current Expense	(4,603,139.67)	
Repairs and Alterations	(316,372.81)	
Equipment	(393,046.80)	
Medical Service Payments	(8,465.25)	
Building Improvements	(2,139.18)	
Land Improvements	(7,017.83)	
Bank Costs	(587.19)	
2015 Capital Improvements	(783,284.82)	
WV OPEB Contribution	(215,398.85)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(13,097,433.57)</b>

Ending Fund Balance	8,592,337.76
Less - Investment Balance June 30, 2015	(7,367,983.89)
<b>CASH BALANCE JUNE 30, 2015</b>	<b>1,224,353.87</b>

# Statement of Revenues/Disbursements

## GAME, FISH AND AQUATIC LIFE FUND (3202)

Cash Balance July 1, 2014		205,478.55
Investment Balance July 1, 2014		432,601.42
Beginning Fund Balance		638,079.97
<b>RECEIPTS</b>		
Fish Kill Reimbursement	2,476.10	
Investment Earnings	682.57	
<b>PLUS TOTAL RECEIPTS</b>		3,158.67
<b>DISBURSEMENTS</b>		
Current Expense	(19,285.28)	
<b>LESS TOTAL DISBURSEMENTS</b>		(19,285.28)
Ending Fund Balance		621,953.36
Less - Investment Balance June 30, 2015		(583,283.99)
<b>CASH BALANCE JUNE 30, 2015</b>		38,669.37

## WILDLIFE DIVERSITY FUND (3203)

Cash Balance July 1, 2014		252,468.76
Investment Balance July 1, 2014		113,191.43
Beginning Fund Balance		365,660.19
<b>RECEIPTS</b>		
Investment Earnings	637.29	
Miscellaneous Collections	553.40	
Sale of Booklets	548.50	
Sale of Wildlife Calendars	89,642.96	
Sale of Wildlife License Plates	338,444.24	
Special Events	4,422.20	
Surplus Property Sale	4,622.50	
Wildlife Cooperative Agreements	189,168.87	
<b>PLUS TOTAL RECEIPTS</b>		628,039.96
<b>DISBURSEMENTS</b>		
Personal Services	(80,851.91)	
Employee Benefits	(34,639.16)	
Current Expense	(38,573.19)	
Bank Costs	(979.77)	
WV OPEB Contribution	(3,772.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		(158,816.03)
Ending Fund Balance		834,884.12
Less - Investment Balance June 30, 2015		(708,723.79)
<b>CASH BALANCE JUNE 30, 2015</b>		126,160.33

**USE & DEVELOPMENT FUND - PUBLIC LAND CORPORATION (3205)**

Cash Balance July 1, 2014 4,785,456.79

**RECEIPTS**

Channel Changes	2,700.00	
Docking Facilities	13,600.00	
Gas & Oil Leases	10,498.64	
Low Water Fords	23,300.00	
Low Water Level Bridges	165,900.00	
Miscellaneous Collections	2,159.27	
Permits	120,025.40	
Pipeline Permits	520,927.50	
Right of Way	93,100.00	
Sand/Gravel ATE Management	7,800.00	
Sand and Gravel Royalties	49,024.75	
Stream Restoration	14,700.00	
Structures	230,100.00	
Subterranean Cable Permit Renewal	54,375.00	
Water Intake Supply System	12,500.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>1,320,710.56</b>

**DISBURSEMENTS**

Personal Services	(85,357.56)	
Employee Benefits	(26,151.60)	
Current Expense	(63,197.70)	
Repairs and Alterations	(100.00)	
Equipment	(102,549.65)	
PEIA Reserve Transfer	(829.00)	
Bank Costs	(768.98)	
WV OPEB Contribution	(2,074.60)	
Land Purchases	(12,000.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(293,029.09)</b>

**CASH BALANCE JUNE 30, 2015** 5,813,138.26

# Statement of Revenues/Disbursements

## WHITWATER STUDY AND IMPROVEMENT FUND (3253)

Cash Balance July 1, 2014		31,764.44
Investment Balance July 1, 2014		22,549.71
Beginning Fund Balance		54,314.15
<b>RECEIPTS</b>		
Investment Earnings	60.76	
Miscellaneous Collections	10,412.15	
Study and Improvement Fees	35,065.85	
Whitewater Stocking Study Fee-Gauley River	6,570.55	
<b>PLUS TOTAL RECEIPTS</b>		<b>52,109.31</b>
<b>DISBURSEMENTS</b>		
Personal Services	(27,420.30)	
Employee Benefits	(8,223.34)	
Current Expense	(22,607.24)	
PEIA Reserve Transfer	(215.00)	
WV OPEB Contribution	(328.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(58,793.88)</b>
Ending Fund Balance		47,629.58
Less - Investment Balance June 30, 2015		(38,210.47)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>9,419.11</b>

## DIVISION OF NATURAL RESOURCES LOTTERY FUND (3267)

Cash Balance July 1, 2014		3,545,194.47
<b>RECEIPTS</b>		
Lottery Transfers	3,196,491.00	
Surplus Property Sale	315.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>3,196,806.00</b>
<b>DISBURSEMENTS</b>		
Personal Services	(1,540,184.46)	
Employee Benefits	(487,883.46)	
Current Expense	(1,004,846.89)	
Repairs and Alterations	(3,648.73)	
Equipment	(119.95)	
PEIA Reserve Transfer	(11,528.00)	
Contractor Pmts for Capital Asset Proj	(575,895.79)	
Consultant Pmts for Capital Asset Proj	(509,011.17)	
WV OPEB Contribution	(70,602.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(4,203,720.45)</b>
<b>CASH BALANCE JUNE 30, 2015</b>		<b>2,538,280.02</b>

**STATE PARK IMPROVEMENT FUND (3277)**

Cash Balance July 1, 2014		12,670,267.30
Beginning Fund Balance		
<b>RECEIPTS</b>		
Lottery Transfers	5,000,000.00	
Adjustment	(13,000.00)	
Miscellaneous Collections	120.00	
Surplus Property Sale	1,005.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>4,988,125.00</b>
<b>DISBURSEMENTS</b>		
Current Expense	(295,283.60)	
Repairs and Alterations	(1,881,626.67)	
Equipment	(50,883.46)	
Contractor Pmts for Capital Asset Proj	(3,479,796.55)	
Consultant Pmts for Capital Asset Proj	(279,303.22)	
Building Improvements	(31,934.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(6,018,827.50)</b>
<b>CASH BALANCE JUNE 30, 2015</b>		<b>11,639,564.80</b>

**CONSOLIDATED FEDERAL FUND (8707)**

Cash Balance July 1, 2014		5,734,530.12
Investment Balance July 1, 2014		3,366,701.02
Beginning Fund Balance		9,101,231.14
<b>RECEIPTS</b>		
<b>Law Enforcement</b>		
Boating Safety	405,844.00	
Duplicate Boat Safety Cards	300.00	
Hunter Safety Replacement Cards	17,384.00	
Hunter Safety	558,587.76	982,115.76
<b>Wildlife Resources</b>		
Acid Water Studies	244,000.65	
Archery Education in Schools	43,630.09	
Bat White Nose Syndrome Study	96,004.69	
Biometrics	83,269.15	
Boating Access Administration	338,911.75	
Commercial Navigable Rivers	50,885.33	
District Wildlife Management	2,183,093.74	
Endangered Species	42,964.31	
Environmental Data Collection	8,837.53	
EPA State Wetlands Development	29,986.34	
Fish & Wildlife Coordination	94,625.67	
Fish Habitat Enhancement Program	15,000.00	
Fish Research Database	2,089.07	
Interagency Coordination	59,063.26	
Investment Earnings	8,760.09	
Miscellaneous	196.00	
Reservoir Investigations	59,006.77	
Rivers and Streams Assessment	75,808.71	
Sugar Grove Contract	15,000.00	

# Statement of Revenues/Disbursements

Small Impoundment Assessment	23,702.36	
State Wildlife Grant	470,266.99	
Surplus Property Sale	11,175.00	
Trout Hatchery Operations	1,726,000.00	
USDP AG NRCS Wildlife Hbt Inc	1,000.00	
US Forest Service Contract	1,231.67	
Warmwater Fish Hatcheries Grant	270,010.08	
Wildlife Research	695,192.62	6,649,711.87
<b>Parks</b>		
Cass Club House National Park Service	0.00	0.00
<b>PLUS TOTAL RECEIPTS</b>		<b>7,631,827.63</b>
<b>DISBURSEMENTS</b>		
Personal Services	(3,455,616.73)	
Employee Benefits	(1,182,890.87)	
Current Expense	(2,849,444.13)	
Repairs and Alterations	(145,252.02)	
Equipment	(403,406.68)	
WV OPEB Contribution	(129,547.70)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(8,166,158.13)</b>
Ending Fund Balance		8,566,900.64
Less - Investment Balance June 30, 2015		(7,195,461.11)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>1,371,439.53</b>

## NON-APPROPRIATED FUNDS

### LAW ENFORCEMENT PROGRAM FUND (3204)

Cash Balance July 1, 2014		1,119,867.15
Investment Balance July 1, 2014		2,962,342.72
Beginning Fund Balance		4,082,209.87
<b>RECEIPTS</b>		
Captive Cervid Facility License	4,250.00	
Cooperative Agreement	70,762.28	
Equipment Reimbursement	26,253.29	
Investment Earnings	4,691.83	
Miscellaneous Collections	4,379.59	
Miscellaneous Permits	2,300.00	
Motorboat Licenses	171,168.50	
Tipping Fees	603,388.23	
Whitewater Rafting Licenses	32,000.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>919,193.72</b>
<b>DISBURSEMENTS</b>		
Personal Services	(353,443.83)	
Employee Benefits	(131,582.63)	
Current Expense	(16,518.92)	
Equipment	(7,442.89)	
WV OPEB Contribution	(16,318.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(525,306.27)</b>
Ending Fund Balance		4,476,097.32
Less - Investment Balance June 30, 2015		(4,176,001.97)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>300,095.35</b>

**LAW ENFORCEMENT CONTRACTS (3208)**

Cash Balance July 1, 2014		11,441.13
<b>RECEIPTS</b>		
Hinton Boat Race Patrol	0.00	
<b>PLUS TOTAL RECEIPTS</b>		0.00
<b>DISBURSEMENTS</b>		
Current Expense	317.40	
<b>LESS TOTAL DISBURSEMENTS</b>		317.40
<b>CASH BALANCE JUNE 30, 2015</b>		11,758.53

**WILDLIFE ENDOWMENT FUND (3224)**

Cash Balance July 1, 2014		5,405.00
Investment Balance July 1, 2014		51,629,246.75
Beginning Fund Balance		51,634,651.75
<b>RECEIPTS</b>		
Investment Earnings	3,394,295.98	
Lifetime Hunting & Fishing License	690,494.50	
<b>PLUS TOTAL RECEIPTS</b>		4,084,790.48
<b>DISBURSEMENTS</b>		
Fund Transfer	(590,000.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		(590,000.00)
Ending Fund Balance		55,129,442.23
Less - Investment Balance June 30, 2015		(55,116,757.73)
<b>CASH BALANCE JUNE 30, 2015</b>		12,684.50

**WILDLIFE RESOURCES-RECREATION FUND (3227)**

Cash Balance July 1, 2014		1,611,308.01
Investment Balance July 1, 2014		9,281,892.37
Beginning Fund Balance		10,893,200.38
<b>RECEIPTS</b>		
Acid Impacted Stream Studies	8,176.43	
Allegheny Power	64,500.00	
Cabin Rentals	220.00	
Campsite Rentals	13,370.32	
Captive Cervid Facility License	4,250.00	
Coal Royalties	561,408.30	
Donation for Stream Treatment with Limestone	11,066.52	
Entrance Fees	47,264.45	
Fish Promotion and Research	111,055.43	
Gas Royalties	12,257,387.05	
Gift Shop Sales	5,089.71	
Gifts & Bequests	42,776.15	
Go-Wild Hunting & Fishing License Issuance Fee	209,118.50	
Habitat Land Inquiries	11,250.00	
Hunters Helping the Hungry	17,233.05	
Information Retrieval	52,655.18	
Investment Earnings	16,863.52	
Leases	5,000.00	
Miscellaneous Collections	2,695.02	

# Statement of Revenues/Disbursements

Mussell Study	61,425.69	
Oil Royalties	8,466.50	
Picnic Shelter Fees	3,574.91	
Real Estate License Fees	703,123.95	
Residence Rentals	875.00	
Scientific Collection Permit	37,475.00	
Surface Damages	274,748.23	
Surplus Property Sale	3,432.50	
Timber Sales	721,061.72	
Transfer From Wildlife Endowment Fund	590,000.00	
Trophy Fish Citations	2,130.00	
Wildlife Cooperative Agreements	46,015.40	
Wildlife Contract Reimbursement	2,859.50	
Wildlife Special Events	17,676.53	
<b>PLUS TOTAL RECEIPTS</b>		15,914,244.56
<b>DISBURSEMENTS</b>		
Personal Services	(590,798.68)	
Employee Benefits	(179,236.66)	
Current Expense	(710,034.88)	
Repairs and Alterations	(101,703.84)	
Equipment	(111,791.42)	
Bank Costs	(128,908.13)	
Land Improvements	(10,028.53)	
Building Improvements	(48,387.48)	
WV OPEB Contribution	(20,614.38)	
<b>LESS TOTAL DISBURSEMENTS</b>		(1,901,504.00)
Ending Fund Balance		24,905,940.94
Less - Investment Balance June 30, 2015		(24,361,919.69)
<b>CASH BALANCE JUNE 30, 2015</b>		544,021.25

## BEAR DAMAGE FUND (3228)

Cash Balance July 1, 2014		126,453.50
Investment Balance July 1, 2014		45,924.85
Beginning Fund Balance		172,378.35
<b>RECEIPTS</b>		
Bear Damage Stamps	261,316.00	
Investment Earnings	167.62	
<b>PLUS TOTAL RECEIPTS</b>		261,483.62
<b>DISBURSEMENTS</b>		
Current Expense	(11,705.56)	
Payment of Claims	(166,682.73)	
<b>LESS TOTAL DISBURSEMENTS</b>		(178,388.29)
Ending Fund Balance		255,473.68
Less - Investment Balance June 30, 2015		(190,722.82)
<b>CASH BALANCE JUNE 30, 2015</b>		64,750.86



**WILDLIFE RESOURCES CONTRACTS FUND (3229)**

Cash Balance July 1, 2014		206,520.20
Investment Balance July 1, 2014		669,830.59
Beginning Fund Balance		876,350.79
<b>RECEIPTS</b>		
Eramet Project - Ohio River	26,730.00	
Special Agreements	2,684.00	
Investment Earnings	919.07	
<b>PLUS TOTAL RECEIPTS</b>		<b>30,333.07</b>
<b>DISBURSEMENTS</b>		
Current Expense	(98,604.52)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(98,604.52)</b>
Ending Fund Balance		808,079.34
Less - Investment Balance June 30, 2015		(771,332.66)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>36,746.68</b>

**MIGRATORY WATERFOWL STAMP FUND (3231)**

Cash Balance July 1, 2014		13,585.10
Investment Balance July 1, 2014		39,325.72
Beginning Fund Balance		52,910.82
<b>RECEIPTS</b>		
Investment Earnings	48.91	
<b>PLUS TOTAL RECEIPTS</b>		<b>48.91</b>
<b>DISBURSEMENTS</b>		
Current Expense	(10,690.49)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(10,690.49)</b>
Ending Fund Balance		42,269.24
Less - Investment Balance June 30, 2015		(39,374.63)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>2,894.61</b>

**CONSERVATION STAMP FUND (3232)**

Cash Balance July 1, 2014		1,192,254.32
Investment Balance July 1, 2014		1,258,147.82
Beginning Fund Balance		2,450,402.14
<b>RECEIPTS</b>		
Conservation Stamp Sales	1,374,177.00	
Investment Earnings	2,627.24	
<b>PLUS TOTAL RECEIPTS</b>		<b>1,376,804.24</b>
<b>DISBURSEMENTS</b>		
Personal Services	(103,797.49)	
Employee Benefits	(10,067.45)	
Current Expense	(144,942.04)	
Repairs and Alterations	(181.80)	
Land Purchases	(593,300.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(852,288.78)</b>
Ending Fund Balance		2,974,917.60
Less - Investment Balance June 30, 2015		(2,695,775.06)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>279,142.54</b>

# Statement of Revenues/Disbursements

## TROUT STAMP FUND (3233)

Cash Balance July 1, 2014		846,870.50
Investment Balance July 1, 2014		1,076,011.35
Beginning Fund Balance		1,922,881.85
<b>RECEIPTS</b>		
Investment Earnings	1,528.78	
Trout Stamp Sales	1,138,524.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>1,140,052.78</b>
<b>DISBURSEMENTS</b>		
Personal Services	(999,491.66)	
Employee Benefits	(414,598.30)	
Current Expense	(6,905.51)	
WV OPEB Contribution	(56,088.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(1,477,083.47)</b>
Ending Fund Balance		1,585,851.16
Less - Investment Balance June 30, 2015		(1,444,851.44)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>140,999.72</b>

## GIFTS, GRANTS & BEQUESTS (3237)

Cash Balance July 1, 2014		51,403.73
<b>RECEIPTS</b>		
Special Events	45,217.12	
<b>PLUS TOTAL RECEIPTS</b>		<b>45,217.12</b>
<b>DISBURSEMENTS</b>		
Current Expense	(44,006.36)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(44,006.36)</b>
<b>CASH BALANCE JUNE 30, 2015</b>		<b>52,614.49</b>

## LAND MINERALS AND SPECIAL PROJECTS (3239)

Cash Balance July 1, 2014		198,330.37
<b>RECEIPTS</b>		
Land Leases	3,667.00	
Miscellaneous Collections	500.00	
Real Estate Taxes	7,334.31	
Rental Leases	1,200.00	
Right-of-Way	19,535.50	
Royalties	100,000.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>132,236.81</b>
<b>DISBURSEMENTS</b>		
Personal Services	(55,795.59)	
Employee Benefits	(18,809.00)	
Current Expense	(3,194.34)	
WV OPEB Contribution	(3,772.00)	
Remittance of Taxes	(3,301.99)	
PEIA Reserve Transfer	(528.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(85,400.92)</b>
<b>CASH BALANCE JUNE 30, 2015</b>		<b>245,166.26</b>

**PAYROLL CLEARING ACCOUNT (3245)**

Cash Balance July 1, 2014		3,775.10
<b>RECEIPTS</b>		
Miscellaneous Collections	0.00	
<b>PLUS TOTAL RECEIPTS</b>		0.00
<b>DISBURSEMENTS</b>		
Employee Benefits	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		0.00
<b>CASH BALANCE JUNE 30, 2015</b>		3,775.10

**LAW ENFORCEMENT AND SPORTS EDUCATION STAMPS (3247)**

Cash Balance July 1, 2014		192,220.22
Investment Balance July 1, 2014		401,635.49
Beginning Fund Balance		593,855.71
<b>RECEIPTS</b>		
Law Enforcement / Sports Ed. Stamps	363,452.00	
Investment Earnings	560.42	
<b>PLUS TOTAL RECEIPTS</b>		364,012.42
<b>DISBURSEMENTS</b>		
Personal Services	(328,296.57)	
Employee Benefits	(112,958.47)	
Current Expense	(1,401.21)	
WV OPEB Contribution	(11,316.00)	
<b>LESS TOTAL DISBURSEMENTS</b>		(453,972.25)
Ending Fund Balance		503,895.88
Less - Investment Balance June 30, 2015		(414,195.91)
<b>CASH BALANCE JUNE 30, 2015</b>		89,699.97

**MAGAZINE SALES & SUBSCRIPTIONS (3248)**

Cash Balance July 1, 2014		112,771.23
Investment Balance July 1, 2014		330,302.19
Beginning Fund Balance		443,073.42
<b>RECEIPTS</b>		
Investment Earnings	481.35	
Magazine Sponsorship	31,796.26	
Magazine Bookshelf Sales	5,064.89	
Magazine Sales	39,268.49	
Magazine Subscriptions	430,766.06	
<b>PLUS TOTAL RECEIPTS</b>		507,377.05
<b>DISBURSEMENTS</b>		
Current Expense	(463,728.62)	
Bank Costs	(1,847.42)	
<b>LESS TOTAL DISBURSEMENTS</b>		(465,576.04)
Ending Fund Balance		484,874.43
Less - Investment Balance June 30, 2015		(456,258.30)
<b>CASH BALANCE JUNE 30, 2015</b>		28,616.13

# Statement of Revenues/Disbursements

## CLEARING ACCOUNT-EQUIPMENT (3251)

Cash Balance July 1, 2014		215,318.66
<b>RECEIPTS</b>		
Surplus Property Sale	0.00	
<b>PLUS TOTAL RECEIPTS</b>		0.00
<b>DISBURSEMENTS</b>		
Current Expense	11,440.00	
<b>LESS TOTAL DISBURSEMENTS</b>		11,440.00
<b>CASH BALANCE JUNE 30, 2015</b>		226,758.66

## CLASS A-1 SMALL ARMS HUNTING LICENSE (3259)

Cash Balance July 1, 2014		12,792.82
Investment Balance July 1, 2014		599,291.50
Beginning Fund Balance		612,084.32
<b>RECEIPTS</b>		
Class A-1 Small Arms Hunting License	70,897.00	
Lifetime Small Arms Hunting License	3,300.00	
Investment Earnings	734.35	
<b>PLUS TOTAL RECEIPTS</b>		74,931.35
<b>DISBURSEMENTS</b>		
Employee Benefits	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		0.00
Ending Fund Balance		687,015.67
Less - Investment Balance June 30, 2015		(646,358.67)
<b>CASH BALANCE JUNE 30, 2015</b>		40,657.00

## PARKS IMPROVEMENT TO FACILITIES (3260)

Cash Balance July 1, 2014		0.00
<b>RECEIPTS</b>		
Interagency Federal Payments	0.00	
<b>PLUS TOTAL RECEIPTS</b>		0.00
<b>DISBURSEMENTS</b>		
Current Expense	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		0.00
<b>CASH BALANCE JUNE 30, 2015</b>		0.00

**WATTERS SMITH MEMORIAL STATE PARK (3261)**

Cash Balance July 1, 2014		4.49
Investment Balance July 1, 2014		86,770.12
Beginning Fund Balance		86,774.61
<b>RECEIPTS</b>		
Gas Royalties	200,878.08	
Investment Earnings	243.04	
<b>PLUS TOTAL RECEIPTS</b>		<b>201,121.12</b>
<b>DISBURSEMENTS</b>		
Equipment	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>0.00</b>
Ending Fund Balance		287,895.73
Less - Investment Balance June 30, 2015		(261,013.16)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>26,882.57</b>

**DECOY ANIMALS ASSESSMENT FEE (3264)**

Cash Balance July 1, 2014		1,838.76
Investment Balance July 1, 2014		6,422.91
Beginning Fund Balance		8,261.67
<b>RECEIPTS</b>		
Decoy Animal Assessment Fee	300.00	
Investment Earnings	8.38	
<b>PLUS TOTAL RECEIPTS</b>		<b>308.38</b>
<b>DISBURSEMENTS</b>		
Current Expense	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>0.00</b>
Ending Fund Balance		8,570.05
Less - Investment Balance June 30, 2015		(7,570.05)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>1,000.00</b>

**STATE PARK OPERATING FUND (3265)**

Cash Balance July 1, 2014		1,878,007.44
Investment Balance July 1, 2014		505,118.64
Beginning Fund Balance		2,383,126.08
<b>RECEIPTS</b>		
Bath / Massages	363,744.56	
Bicycle Rental	632.76	
Boat Charters	18,447.20	
Boat Rental	78,006.13	
Cabin Advance Reservation	3,718,961.86	
Cabin Rentals	1,441,186.81	
Campsite Advance Reservation	594,117.11	
Campsite Rentals	1,368,126.87	
Cass Advance Fares	204,003.84	
Coin Laundry Machines	5,808.55	
Consumers Sales Tax	73,506.77	
Cot & Crib Rental	22,005.96	
Dinner Train Advance	12,818.71	
Driving Range	17,688.64	

# Statement of Revenues/Disbursements

Entrance Fees	292,328.68	
Equipment Rental	5,811.78	
Facility Use Rental	123,123.92	
Firewood Sales	119,129.62	
Food & Snacks	225,451.70	
Games	5,287.53	
Gas Royalties	4,840,767.77	
Gift Cards	51,286.03	
Gift Shop Sales	1,834,519.40	
Greens Fees	548,831.42	
Group Camps	30,500.11	
Hotel Occupancy Tax	533,135.62	
Insurance Payments	76,675.11	
Investment Earnings	3,700.75	
Lodge Advance Reservation	2,604,462.15	
Lodge Rooms	2,689,438.34	
Lottery Collections - Net	7,548.84	
Miniature Golf	27,446.68	
Miscellaneous Collections	42,854.50	
Miscellaneous Non-Taxable	(2,767.17)	
Miscellaneous Taxable	60.00	
Picnic Shelter Fees	214,862.33	
Pro Shop	122,277.14	
Purchasing Card Rebate	657,699.64	
Railfan Weekend Tickets	1,429.94	
Railroad Charters	3,952.83	
Railroad Fares	479,754.19	
Residence Rentals	12,521.79	
Restaurants	1,333,591.46	
Roman Bath	126,810.72	
Shooting Ranges	24,240.85	
Sled Rental	83,498.80	
Special Events	138,386.99	
Surplus Property Sale	25,155.00	
Swimming Fees	385,527.17	
Tram	112,562.30	
Vending Machines	40,040.11	25,740,959.81
<b>RECEIPTS - CONCESSIONS</b>		
Boat Dock Concession	76,891.60	
Coin Machine Concession	10,945.51	
Food and Snacks Concession	26,490.60	
Golf Carts	199,121.56	
Marina	7,789.77	
Miscellaneous Concession	95,739.11	
Restaurant Concession	77,293.07	
Riding Stable	14,919.10	509,190.32
<b>PLUS TOTAL RECEIPTS</b>		<b>26,250,150.13</b>

**DISBURSEMENTS**

Personal Services	(6,038,474.25)	
Employee Benefits	(1,401,228.68)	
Current Expense	(10,663,806.82)	
Repairs and Alterations	(15,616.46)	
Remittance Of Taxes	(534,945.51)	
Grants and Awards	(500.00)	
Bank Costs	(301,151.96)	
PEIA Reserve Transfer	(14,452.00)	
Building Improvements	(227.91)	
Medical Service Pmts	(2,092.35)	
Consultant Pmts for Capital Asset Proj	480.00	
WV OPEB Contribution	(74,726.60)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(19,046,742.54)</b>
Ending Fund Balance		9,586,533.67
Less - Investment Balance June 30, 2015		(8,055,446.30)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>1,531,087.37</b>

**CANAAN MAINTENANCE FUND (3274)**

Cash Balance July 1, 2014		18,597.86
<b>RECEIPTS</b>		
Maintenance Transfer from Operating Fund	0.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>0.00</b>
<b>DISBURSEMENTS</b>		
Current Expense	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>0.00</b>
<b>CASH BALANCE JUNE 30, 2015</b>		<b>18,597.86</b>

**COYOTE MANAGEMENT FUND (3292)**

Cash Balance July 1, 2014		678.18
Investment Balance July 1, 2014		3,909.11
Beginning Fund Balance		4,587.29
<b>RECEIPTS</b>		
Coyote Management Donations	1,934.50	
Investment Earnings	5.64	
<b>PLUS TOTAL RECEIPTS</b>		<b>1,940.14</b>
<b>DISBURSEMENTS</b>		
Current Expense	0.00	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>0.00</b>
Ending Fund Balance		6,527.43
Less - Investment Balance June 30, 2015		(8,914.75)
<b>CASH BALANCE JUNE 30, 2015</b>		<b>612.68</b>

**ALL FLOOD DISASTER FUNDS (3015,3280,3281,3282,3284,3293,3294,3295,3296,3297,3298,3299)**

Fund 3015 (OCT '12 SANDY DISASTER) Cash Balance July 1, 2014	277,395.23
Fund 3280 (MAY '02 FLOOD DISASTER) Cash Balance July 1, 2014	0.00
Fund 3281 (JUN '03 FLOOD DISASTER) Cash Balance July 1, 2014	0.00
Fund 3282 (NOV '03 FLOOD DISASTER) Cash Balance July 1, 2014	30,829.18
Fund 3284 (MAY '04 FLOOD DISASTER) Cash Balance July 1, 2014	3,212.22
Fund 3293 (JUN '08 FLOOD DISASTER) Cash Balance July 1, 2014	7,209.38
Fund 3295 (MAR '10 FLOOD DISASTER) Cash Balance July 1, 2014	714.43
Fund 3296 (DEC '09 FLOOD DISASTER) Cash Balance July 1, 2014	3,240.00
Fund 3297 (FEB_MAR '12 FLOOD DISASTER) Cash Balance July 1, 2014	132,045.08
Fund 3298 (MAR '12 FLOOD DISASTER) Cash Balance July 1, 2014	3,729.34
Fund 3299 (MAR '12 FLOOD DISASTER) Cash Balance July 1, 2014	226,251.14

**RECEIPTS**

Fund 3015 Transfers In Hurricane Sandy Disaster	672,877.95	
Fund 3284 Transfers In	10.00	
Fund 3295 Transfers In	4,800.00	
Fund 3297 Re-characterization	0.00	
Fund 3297 Transfers In	0.00	
Fund 3298 Transfers In	0.00	
Fund 3299 Transfers In	0.00	
<b>PLUS TOTAL RECEIPTS</b>		<b>677,687.95</b>

**DISBURSEMENTS**

Fund 3215 Contractor Pmts for Capital Asset Proj	(384,508.03)	
Fund 3282 Equipment	(9,180.00)	
Fund 3282 Contractor Pmts for Capital Asset Proj	(10,401.88)	
Fund 3284 Contractor Pmts for Capital Asset Proj	(1,543.78)	
Fund 3293 Contractor Pmts for Capital Asset Proj	(3,463.77)	
Fund 3295 Contractor Pmts for Capital Asset Proj	(2,306.30)	
Fund 3296 Contractor Pmts for Capital Asset Proj	(1,556.75)	
Fund 3297 Contractor Pmts for Capital Asset Proj	(63,444.76)	
Fund 3298 Contractor Pmts for Capital Asset Proj	(1,791.70)	
Fund 3299 Contractor Pmts for Capital Asset Proj	(108,708.69)	
<b>LESS TOTAL DISBURSEMENTS</b>		<b>(586,905.66)</b>

**CASH BALANCE JUNE 30, 2015** **775,408.29**

**RECAPITULATION OF FUNDS**

	<b>Revenue</b>	<b>Disbursements</b>	<b>Investments</b>
General Fund	0.00	(19,597,493.81)	0.00
Consolidated Federal Funds	7,631,827.63	(8,166,158.13)	7,195,461.11
Appropriated Special Revenue Funds	23,441,915.94	(23,849,905.80)	8,698,202.14
Non-Appropriated Special Revenue Funds	50,975,800.17	(26,304,712.19)	98,643,493.14
<b>TOTAL ALL FUNDS</b>	<b>82,049,543.74</b>	<b>(77,918,269.93)</b>	<b>114,537,156.39</b>



# Office of Land and Streams

The Office of Land and Streams serves the division in many capacities. Two primary responsibilities are: the supervision and administration of the Division's land acquisition and real estate title documents program; and the administration of the state's rivers and streams. These main functions involve the acquisition, exchange, and leasing of land and improvements and exercising control over the various activities in the state's rivers and streams. They include organizing and archiving of the real estate title documents for the division and the everyday administration of real estate titles, various rights-of-entry, and license agreements on the State's rivers and streams.

**Office of Land and Streams**  
Joe T. Scarberry,  
*Supervisor*

## **LAND ACQUISITION**

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The acquisition function is accomplished by purchase, lease, condemnation, donations, bequests, and exchanges. It involves various procedures such as: the collection of legal data from county courthouse records, negotiations with property owners to obtain leases and/or options to purchase, detailed physical inspections of all types of real estate, obtaining appraisal reports of fair market value, and the preparation of various real estate title documents and real estate quantitative and status reports.

The Office of Land and Streams is responsible for procedures dealing with the preparation, execution, and recordation of legal documents such as deeds, leases, license agreements, rights-of-way, joint interagency agreements, easements, and land purchase invoices. It also prepares numerous other types of documents for state and federal agencies including permits, applications, agreements, and contracts.

This office maintains a close liaison with the attorneys assigned by the State Attorney General's Office to projects such as land acquisitions, court cases, and other required real estate legal work. This office also handles all contract boundary survey work and contracts consultants for engineering services relating to oil, gas, and coal resources owned or leased by the Division of Natural Resources. The primary land acquisition program and the real estate related activities are conducted on behalf of the West Virginia Department of Commerce, the Parks and Recreation and Wildlife Resources sections of the Division of Natural Resources, and the Division of Forestry.

## **RIVERS AND STREAM MANAGEMENT**

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The Division of Natural Resources holds for the state the title to the beds of the state's rivers, creeks, and streams totaling some 34,000 miles or some 5,000 named waterways in the state. In the past year, 311 right-of-entry letters were granted to governmental agencies, companies, and individuals to conduct construction activities in the state's rivers, creeks, and streams; 1,039 right-of-way licenses were granted for pipelines, underground or underwater cables, and overhead power and telephone lines crossing the state's waterways; and 413 large stream structure agreements were granted for bridges and culverts.

## **OTHER FUNCTIONS**

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This office is also responsible for the up-to-date inventory of all lands owned or leased by the Division of Natural Resources. The Division of Natural Resources lands are broken down as follows: Administration 14 acres, State Forests 71,488 acres, State Parks 76,961 acres, and Wildlife Management Areas/Public Access Sites 378,683 acres, for a total of 527,146 acres of land with partial mineral rights as well as holding title to 34,000 miles of the state's river and creek beds. This acreage encompasses some 379 separate areas such as wildlife management areas, public access sites, wetlands, state parks, trails, and forest lands. These lands provide recreation and are of great natural and/or historical significance and are managed for the use and benefit of the citizens of West Virginia and its visitors.

## PROPERTIES ACQUIRED

AREA	ACREAGE
<b>Big Ditch WMA</b>	
Hal Combs	0.61
<b>Holly Meadow Bridge Public Access Site</b>	
David M. Hedrick	0.557
<b>Shanghai Bridge Public Access Site</b>	
Rock Solid LLC	0.88
<b>Wallback Wildlife Management Area</b>	
James Wilmoth	32.00
Willard Falls	150.00
<b>Winfield Bridge Public Access Site</b>	
Greta Duffield	0.2583
Melissa Shaffer	0.3626
William Flint	0.2253

## LAND LICENSED OR LEASED TO DNR

AREA	ACREAGE
<b>Cheat River Canyon Wildlife Management Area</b>	
Conservation Fund	1525.00
Nature Conservancy	1332.00
David Hough	2.00
<b>Clay County Public Access Site</b>	
Clay County BDA	0.50
<b>French Creek Embayment Public Access Site</b>	
Allegheny Energy	0.562
<b>Hanging Rock Public Access Site</b>	
Charles R. Herriott	1.00*
<b>Hartland Bridge Public Access Site</b>	
Elk River Railroad	0.50
<b>Hedgesville Bridge Public Access Site</b>	
Division of Highways	1.00*
<b>Huntington Guyandotte Public Access Site</b>	
Greater Huntington Park & Recreation District	5.00
<b>Keyser McCoole Bridge Public Access Site</b>	
Division of Highways	0.47
<b>Little Coal Road Public Access Site</b>	
Division of Highways	1.86*
Division of Highways	2.07*
Division of Highways	2.32

<b>Madison Creek Bridge Public Access Site</b> Division of Highways	0.50*
<b>McClintic Wildlife Station</b> WV Department of Agriculture	400.00*
<b>Moundsville Public Access Site</b> Division of Highways	0.81*
<b>Otter Creek Wildlife Management Area</b> Scott Weaner	5.95*
<b>Petersburg Bridge Public Access Site</b> Grant County Commission	.50
<b>Raymond City Public Access Site</b> Town of Poca	1.00*
<b>Second Creek Future Farmers of America</b> Quiche Angus Farms	1.00*
Gregory Jewell	0.21*
<b>Winfield Bridge Public Access Site</b> City of Winfield	0.795

\*Renewals not included in summary of new acreages

	<b>ACREAGE</b>
8 parcels acquired	184.89
11 parcels licensed or leased	2,869.65
1 license or lease agreement canceled	-0.61
<b>Net increase for FY 2013-2014</b>	<b>+3,053.93</b>

## OPTIONS TO PURCHASE OBTAINED

AREA	ACREAGE
<b>Audra State Park</b> Lock 3 Company	72.00
<b>Charles E. "Tate" Lohr Trout Hatchery</b> B.A. Mullican Lumber Company	495.00
<b>Holly Meadows Bridge Public Access Site</b> David Hedrick	0.557
<b>Meadow River Wetland Wildlife Management Area</b> EBX-EM LLC	81.00
<b>Ritchie Mines Wildlife Management Area</b> Coastal Timberland	100.00
<b>Wallback Wildlife Management Area</b> James Wilmouth Willard Falls	32.00 150.00
<b>Winfield Bridge Public Access Site</b> Greta Duffield Melissa Shaffer William Flint	0.2583 0.3626 0.2253

## PARCELS IN PROCESS OF ACQUISITION

<b>PARCELS IN PROCESS OF ACQUISITION:</b>	<b>5</b>
<b>TOTAL ACREAGE</b>	<b>753.00</b>

AREA	ACREAGE
<b>Audra State Park</b> Lock 3 Company	72.00
<b>Greenbrier River Trail</b> Greenbrier River Trail Foundation	5.00
<b>Charles E. "Tate" Lohr Trout Hatchery</b> B.A. Mullican Lumber Company	495.00
<b>Meadow River Wetland Wildlife Management Area</b> EBX-EM LLC	81.00
<b>Ritchie Mines Wildlife Management Area</b> Coastal Timberland	100.00

## PROPERTY MANAGEMENT

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The Office of Land and Streams prepared and processed, through various stages of completion, 126 documents relating to the use of the Division of Natural Resources' real estate holdings. These documents included lease agreements, license agreements, easements, mitigation agreements, and amendments and supplements to other existing agreements. Land rights covered by these agreements included road rights-of-way, power line, cable line, water line, sewage line, and gas and oil line rights-of-way.

The processing of these agreements required close communication with various field and central office personnel with various other sections of the Division of Natural Resources and with the Department of Commerce, the Division of Forestry and other state, county, and local governmental offices.

## RIVERS AND STREAM MANAGEMENT

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Another function of the Division of Natural Resources is to hold title to the beds of the streams within the State of West Virginia. The Office of Land and Streams exercises control over the following activities:

- Dredging and/or pumping of sand, gravel, and derelict coal from the beds of the streams in the state.
- Leasing areas of the beds and under the beds of the streams for the purpose of exploring for oil, gas, and other minerals.
- Utilizing the beds of the streams for the purpose of crossing or placing in the streams pipelines, fords, submarine cables, culverts, bridges, low water bridges, dams, dikes, commercial docking, loading and mooring facilities, recreational marinas, and other structures.

During FY 2014-2015, 714 rights-of-entry were issued for various types of in-stream construction activities. These included channel changes, bridge construction, culvert construction, gravel removal, ford preparation, stream bank protection, water impoundments, fills, and pipeline construction.

During FY 14-15, 1,039 rights-of-way or license agreements were issued for gas, water, and sewer pipelines; underground and overhead telephone, power, and fiber optic cables; and loading, docking and mooring agreements.

Licensed commercial sand, gravel and coal dredging and/or pumping operations produced 213,617 tons of sand and gravel from the beds of the streams in 2014-2015, as reflected below:

### 2014-2015 COMMERCIAL DREDGERS REPORT

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Total Tonnage Used

COMPANY	RIVER/CREEK	TYPE	TONS
Tri-State River Products	Ohio River	Sand & Gravel	213,617

# Law Enforcement Section



## Law Enforcement Section

Jerry B. Jenkins, *Chief*

The Law Enforcement Section is responsible for the prompt, orderly, and effective enforcement of all laws of Chapter 20, Code of West Virginia, and rules promulgated under that authority. Of primary importance is the protection of West Virginia's wildlife to the degree that they are not endangered by unlawful activities. A highly visible, uniformed Natural Resources Police Officer patrol is the only viable way to accomplish this mission. Prevention and apprehension are crucial to the enforcement goal, and the Natural Resources Police Officer is meeting that goal. In West Virginia, no species of wildlife is jeopardized because of illegal taking.

## LAW ENFORCEMENT PROGRAM

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The Law Enforcement Section normally has a staffing level of 123 Natural Resources Police Officers (NRPO) and 11 support personnel. The Section currently has 114 Natural Resources Police Officers. Six Natural Resources Police Officers retired, two officers and one civilian resigned and 10 new officers and one civilian were employed during fiscal year 2015.

The Law Enforcement Section has been actively seeking new and innovative methods for the accomplishment of our overall mission. The following are just some of the highlights of this past fiscal year:

- Recently assumed all the law enforcement duties for the Hatfield and McCoy Regional Recreation Authority. Three officers are stationed full time to this area to attend to trail responsibilities.
- Creation of the Natural Resources Police Officer Facebook page. Several investigations have been launched from tips received from this page. The page gives law enforcement officers the ability to communicate with the public and to highlight law enforcement activities.
- Participated in numerous public meetings to provide for a better understanding of the Law Enforcement Section's goals and objectives.
- Monitored various trout stockings to ensure compliance.
- Utilized deer, turkey, and bear decoys in an effort to curtail "road hunting" violations.
- Increased boating and fishing patrols on all major Corps of Engineers lakes.
- Provided watercraft support to various regattas and other major river events.
- Participated in the overall planning and coordination of the National Hunting and Fishing Day Celebration at Stonewall Resort State Park.
- Increased ATV patrols on wildlife management areas in an effort to deter unlawful entry.
- Created DNR Law Enforcement Honor Guard.
- Nine officers graduated from the West Virginia State Police Academy during fiscal year 2015.
- Purchased 15 new F-150 trucks and 8 new Ford Police Interceptor SUVs.
- Purchased 95 laptop computers for officers during fiscal year 2015. A portion of the money used to pay for these computers came from a state grant.
- Purchased 20 Motorola Dual Band Mobile Radios for officers.
- Six tree stands were donated for educational purposes to DNR Law Enforcement through grant funding.
- Grant money was received for officers to patrol and enforce boating under the influence laws on the state's waterways.

## OFFICER TRAINING

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Four regional training sessions consisting of one unit of Defensive Tactics and three units of Firearm Instruction were conducted in each district.

Officers attended various training classes on tree stand safety, cyber investigation, defensive driving, First Aid/CPR, and field sobriety training.

Fifteen officers received Honor Guard training at Camp Dawson.

One officer was sent to the National Association of State Boating Law Administrators Officer Water Survival Training and conducted several sessions of training for the uniformed officers in the Law Enforcement Section.

ATV safety classes were conducted for our newly hired officers.

Officers have attended various in-service classes offered around the state to maintain their police certifications.



## **HUNTER EDUCATION PROGRAM**

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The mandatory Hunter Education Program in West Virginia continues to be a success. During fiscal year 2015, more than 6,416 students graduated from 448 statewide hunter education classes. The volunteer hunter education instructors continue to provide a great service to the Hunter Education Program. More than 187 volunteer instructors drove 11,992 miles and donated more than 3,156 hours to the mandatory program. Natural Resources Police Officers logged 1,750 hours and drove 16,891 miles.

The Law Enforcement Section dedicates six regional training sergeants, one office assistant, and one state coordinator to this program.

The Law Enforcement Section maintains online class information and registration services that can be accessed on the DNR web site, [www.wvdnr.gov](http://www.wvdnr.gov). Online classes are also offered at the same site. Those interested in doing an online course have two options to select from. The courses are designed to eliminate the classroom portion; however, once completed, the student must print a voucher and then contact the nearest district office to make an appointment to take a hands-on practicum and final exam.

During the 2014 calendar year, West Virginia experienced 8 Class A hunting incidents, resulting in no fatalities. Class A hunting incidents are defined as an injury caused by the discharge of a bow or firearm while hunting. There were 9 Class B hunting incidents resulting in 3 fatalities. Class B incidents are defined as any other hunting related injury. Three of the Class B incidents involved falling from a tree stand resulting in no fatalities. One other hunter died of a heart attack. There were 3 Class C hunting incidents resulting in 1 fatality. Class C incidents are defined as non-hunting related shooting injuries. There was 1 Class D hunting incidents resulting in 1 fatality. Class D is defined as property damage reports. There were 2 non-reportable incidents.

Officers across the state have participated in several sporting and hunting shows, attended summer camps and other special events such as JAKES Day, BOW (Becoming an Outdoor Woman), and Archery In the School programs.

The Law Enforcement Section has conducted numerous interviews for TV, radio, and magazines promoting safe hunting and boating.



## **BOATING SAFETY/EDUCATION PROGRAM**

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Boating safety classes are offered in all of the counties in West Virginia. The U.S. Coast Guard Auxiliary, the U.S. Power Squadrons, and the National Association of State Boating Law Administrators (NASBLA) have approved courses. Classes are also available online at [www.wvdnr.gov](http://www.wvdnr.gov). The Law Enforcement Section is directly involved in either teaching or assisting in these courses. Anyone born after Dec. 31, 1986, is required to successfully complete a NASBLA-approved course before operating a motorboat. Several news releases have been distributed and interviews have been conducted to get this message out to the public.

Officers from this Section have participated in boating events and patrols around the state in an effort to promote water safety and reduce the number of accidents.

Sixty-eight officers participated in the nationwide program, Operation Dry Water, in an effort to reduce alcohol-related boating incidents. This operation resulted in 337 total vessels checked, 674 boaters contacted, 17 citations written, 22 warnings written and 5 media contacts. During the weekend of Operation Dry Water, inclement weather, with rain and high waters, resulted in lower boating activity than previous years.

## **WHITewater ENFORCEMENT PROGRAM**

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The Law Enforcement Section has the responsibility of regulating the commercial whitewater industry in West Virginia. Twenty-seven commercial whitewater outfitters and guides were licensed for FY 14-15.

The Law Enforcement Section issues all licenses; collects fees; maintains submitted injury reports, user number reports and trip leader reports for outfitters; investigates new license applications; and reviews license transfers for approval. Natural Resources Police Officers patrol rivers, conduct compliance checks on guides and equipment and investigate whitewater accidents.

The Whitewater Commission and the Division of Natural Resources continue to work together, making commercial whitewater operations as efficient and safe as possible. The Commission and Division have worked diligently over the past year to update the whitewater reporting systems. The new website is complete and has streamlined all required reporting by whitewater outfitters.



## LAW ENFORCEMENT ACTIVITY

JULY 4, 2014 – JULY 3, 2015

DISTRICT	CLASSIFICATION OF HOURS			ARRESTS			WARNINGS			MEETINGS & EVENTS		COMPLAINTS		
	SPECIAL DETAIL HOURS	REGULAR WORK HOURS	TOTAL HOURS	CHAPTER 20 ARRESTS	CHAPTER 22 ARRESTS	OTHER ARRESTS	CHAPTER 20 WARNINGS	CHAPTER 22 WARNINGS	OTHER WARNINGS	MEETINGS	EVENTS	RECEIVED	WILDLIFE DAMAGE INVEST.	OTHERS INVESTIGATED
ONE	34	36687	36721	646	116	97	492	207	134	25	59	1398	254	1171
TWO	18	29019	29037	602	124	134	161	103	115	42	36	1060	398	653
THREE	158	28589	28747	509	256	181	459	485	232	38	74	1211	415	822
FOUR	640	32130	32770	546	90	98	933	218	161	55	32	1177	308	881
FIVE	12	37199	37211	1403	240	169	1245	1271	294	25	67	1298	122	1200
SIX	116	27783	27899	862	77	102	575	211	109	10	31	627	106	522
TOTALS:	978	191407	192385	4568	903	781	3865	2495	1045	195	299	6771	1603	5249

## REPORT OF PROSECUTIONS BY CHARGE

FY 2014–2015

HEADING AND CHARGE	DISTRICT							TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX		
<b>LITTERING</b>								
LITTER, LESS THAN 100 LBS.	41	38	49	9	37	16	190	
LITTERING, 100 – 500 LBS.	2	1	3	1	0	0	7	
LITTERING, GREATER THAN 500 LBS.	0	0	12	0	1	0	13	
MANDATORY DISPOSAL OF LITTER	4	13	3	0	6	1	27	
OTHER LITTERING VIOLATIONS	0	2	7	1	6	5	21	
<b>TOTAL LITTERING</b>	<b>47</b>	<b>54</b>	<b>74</b>	<b>11</b>	<b>50</b>	<b>22</b>	<b>258</b>	

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
<b>LICENSE</b>							
RESIDENT HUNTING WITHOUT LICENSE	20	22	27	21	40	39	169
RESIDENT FISHING WITHOUT LICENSE	67	27	37	31	222	80	464
IMPROPER HUNTING LICENSE	0	0	0	1	0	0	1
MAKING FALSE APPLICATION - HUNTING LICENSE	0	0	1	0	1	0	2
HUNTING WITHOUT CLASS A-1 LICENSE	0	0	0	0	1	0	1
HUNTING DEER WITHOUT CLASS N LICENSE	7	2	1	0	6	0	16
FISHING PARAPHERNALIA IN POSSESSION W/O LICENSE	7	11	9	0	14	8	49
HUNTING PARAPHERNALIA IN POSSESSION W/O LICENSE	0	3	0	1	2	2	8
HUNTING BEAR WITHOUT BEAR DAMAGE	0	1	0	0	0	0	1
HUNTING WHILE LICENSE REVOKED	1	0	0	0	1	1	3
FISHING WHILE REVOKED	0	0	0	0	0	1	1
HUNTING MIGRATORY BIRDS WITHOUT FEDERAL STAMP	0	0	0	0	1	0	1
TRAPPING WITHOUT LICENSE	0	1	1	0	0	0	2
MAKING FALSE APPLICATION - LIFETIME HUNT LICENSE	0	0	1	0	0	0	1
MAKING FALSE APPLICATION - LIFETIME HUNT/FISH LICENSE	0	1	0	0	0	0	1
MAKING FALSE APPLICATION - HUNT/FISH LICENSE	1	0	0	0	0	2	3
MAKING FALSE APPLICATION - FISH LICENSE	2	0	0	0	0	0	2
NON-RESIDENT HUNTING WITHOUT LICENSE	7	2	9	2	9	9	38
NON-RESIDENT FISHING WITHOUT LICENSE	19	56	9	9	20	10	123
OTHER LICENSE VIOLATIONS	7	6	3	0	62	2	80
<b>TOTAL LICENSE</b>	<b>138</b>	<b>132</b>	<b>98</b>	<b>65</b>	<b>379</b>	<b>154</b>	<b>966</b>

### HUNTING

LOADED GUN IN VEHICLE	28	22	53	5	39	35	182
UNCASED GUN IN VEHICLE AT NIGHT	5	4	4	0	4	5	22
SPOTLIGHTING WITH FIREARM OR IMPLEMENT IN POSSESSION	9	2	2	2	2	6	23
ILLEGAL POSSESSION OF WILDLIFE OR PARTS THEREOF - GAME	60	33	27	16	49	77	262
HUNTING CLOSED SEASON	19	13	15	13	15	42	117
EXCEEDING DAILY BAG LIMIT	0	1	0	0	4	2	7
UNCASED GUN, CLOSED SEASON	1	3	0	0	0	3	7
UNCASED GUN ON SUNDAY	0	1	1	0	0	0	2
FAILURE TO FIELD TAG GAME	9	10	12	5	12	10	58
FAILURE TO CHECK GAME	23	8	11	2	11	25	80
NEGLIGENT SHOOTING	0	1	1	0	0	0	2
SHOOTING FROM OR ACROSS HIGHWAY	4	2	6	0	1	11	24
SHOOTING WITHIN 500 FEET OF DWELLING; 400 CHURCH/SCHOOL	11	1	8	2	4	3	29
HUNTING WITHOUT PERMISSION	25	30	21	24	67	36	203
POSSESSION OF ILLEGAL HUNTING PARAPHERNALIA	0	0	0	0	0	1	1

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
ILLEGAL TRAPPING	3	25	10	0	0	6	44
HUNTING MIGRATORY BIRDS WITH UNPLUGGED GUN	0	0	0	0	0	1	1
HUNTING MIGRATORY BIRDS WITH ILLEGAL WEAPON	1	0	0	0	0	0	1
ILLEGAL METHOD OF HUNTING - (MUST BE IN 20-2-5)	0	0	2	1	0	20	23
HUNTING AFTER KILLING LEGAL DEER	5	0	0	0	0	3	8
ILLEGALLY CARRYING A PISTOL OR REVOLVER	0	1	1	0	0	0	2
KILLING PROTECTED BIRD	0	2	0	0	0	0	2
BRANDISHING A DEADLY WEAPON	0	0	0	0	0	1	1
ILLEGAL SALE OF WILDLIFE - INCLUDING BEAR	2	1	0	0	2	0	5
ILLEGAL TRANSPORT OF WILDLIFE OUT OF STATE	0	0	0	1	0	0	1
ILLEGAL OVER BAIT TURKEY/GROUSE/PHEASANT/QUAIL	2	3	2	0	0	13	20
ILLEGAL KILLING OR TAKING OF DEER, TURKEY OR BOAR	15	1	8	2	2	4	32
INSUFFICIENT OR NO BLAZE ORANGE	6	15	12	6	5	3	47
HUNTING ON SUNDAY	1	1	0	0	1	0	3
HUNTING DEER 1/2 HR AFTER SUNSET OR BEFORE SUNRISE	6	5	1	4	1	26	43
SHOOTING AT GAME NOT PLAINLY VISIBLE	0	2	0	0	0	0	2
SHOOTING/HUNTING FROM A MOTOR VEHICLE	15	14	18	6	32	22	107
ILLEGAL KILLING OR TAKING OF BEAR	1	0	1	0	0	0	2
HUNTING WHILE UNDER THE INFLUENCE	1	0	0	0	0	2	3
ATV IN RESTRICTED AREA	14	2	0	0	8	0	24
HUNT WITH CROSSBOW WITHOUT CLASS Y PERMIT	1	0	1	0	2	0	4
HUNT IN VEHICLE WITHOUT CLASS Q PERMIT	0	0	0	0	1	0	1
HUNTING WITHOUT REQUIRED HUNTER EDUCATION CARD	0	0	0	0	3	1	4
INTERFERENCE WITH HUNTING/TRAPPER	0	1	0	0	1	0	2
KILL BEAR OVER BAIT	1	3	0	0	1	0	5
ILLEGAL POSSESSION OF BEAR	0	0	2	1	2	0	5
HUNTING BEAR CLOSED SEASON	0	2	0	1	1	0	4
FAILURE TO FIELD TAG BEAR	0	0	0	1	0	0	1
VIOLATION OF BEAR LAW	12	1	0	0	0	0	13
SHOOTING/HUNTING FROM AN ATV	0	0	1	0	0	0	1
OTHER GAME LAW VIOLATIONS	11	15	14	2	24	7	73
<b>TOTAL HUNTING</b>	<b>291</b>	<b>225</b>	<b>234</b>	<b>94</b>	<b>294</b>	<b>365</b>	<b>1503</b>

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
<b>FISHING</b>							
TAKING FISH BY ILLEGAL METHOD	0	0	9	0	1	3	13
EXCEEDING DAILY CREEL LIMIT	2	16	1	0	6	2	27
ILLEGAL POSSESSION OF FISH, MINNOWS AND AQUATIC LIFE	1	0	2	0	9	1	13
USING PROHIBITED BAIT IN RESTRICTED AREA	1	6	6	0	0	0	13
FISHING WITHOUT PERMISSION	1	3	1	1	0	3	9
FISHING IN RESTRICTED AREA	3	0	0	0	14	0	17
OTHER FISHING VIOLATIONS	2	0	0	1	15	9	27
<b>TOTAL FISHING</b>	<b>10</b>	<b>25</b>	<b>19</b>	<b>2</b>	<b>45</b>	<b>18</b>	<b>119</b>

<b>BOATING</b>							
OPERATING UNREGISTERED WATERCRAFT	9	6	5	2	23	6	51
OPERATING WATERCRAFT WITHOUT PROPER EQUIPMENT	1	0	2	0	3	2	8
INSUFFICIENT NUMBER OF LIFE PRESERVERS	25	46	22	3	19	20	135
OVERLOADING A WATERCRAFT	0	0	8	0	3	3	14
IMPROPER LOCATION/SPACING OF NBRS ON WATERCRAFT	0	0	0	0	1	0	1
RECKLESS OPERATION OF WATERCRAFT	3	0	2	0	7	1	13
CREATING A WAKE IN A NO-WAKE ZONE	3	0	14	0	0	0	17
PULLING SKIER WITHOUT OBSERVER OR MIRROR	1	0	3	0	4	3	11
SKIING WITHOUT A LIFE PRESERVER	1	0	1	0	0	0	2
NONE OR NO APPROVED EQUIPMENT	1	0	8	0	3	4	16
OPERATING A WATERCRAFT IN RESTRICTED AREA	0	0	0	0	1	0	1
OVERPOWERING A WATERCRAFT	0	0	0	0	0	2	2
OPERATING WATERCRAFT WHILE UNDER THE INFLUENCE	0	0	5	0	0	0	5
BOATING UNDER THE INFLUENCE	3	0	3	0	5	7	18
OPERATING WITHOUT REQUIRED BOATER SAFETY CARD	3	0	0	1	5	3	12
PASSENGER UNDER 12 WITHOUT PFD WHILE IN OPERATION	2	3	18	0	2	7	32
OTHER BOATING VIOLATIONS	9	0	19	0	18	5	51
<b>TOTAL BOATING</b>	<b>61</b>	<b>55</b>	<b>110</b>	<b>6</b>	<b>94</b>	<b>63</b>	<b>389</b>

<b>WASTE MANAGEMENT</b>							
TREATMENT, STORAGE, DISPOSAL OF HAZARDOUS WASTE PERMIT VIOLATION	0	0	2	1	0	0	3
KNOWING ENDANGERMENT	0	0	0	0	0	1	1
CONTRIBUTING TO AN OPEN DUMP	8	7	35	3	7	4	64
UNPERMITTED SOLID WASTE FACILITY	0	0	0	0	0	1	1
ENDANGERMENT BY WASTE DISPOSAL	4	0	0	0	0	0	4
WASTE TIRE VIOLATION 22-15-21	0	0	0	1	1	1	3
UNAUTHORIZED USE OF DUMPSTER 61-3-53	3	2	2	0	0	0	7
OPEN BURNING OF REFUSE	13	25	28	3	18	18	105

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
FAILURE TO SHOW PROOF OF PROPER DISPOSAL	11	41	14	3	3	2	74
OTHER SOLID WASTE VIOLATIONS	22	2	18	3	26	6	77
<b>TOTAL WASTE MANAGEMENT</b>	<b>61</b>	<b>77</b>	<b>99</b>	<b>14</b>	<b>55</b>	<b>33</b>	<b>339</b>

#### POLLUTION

STREAM POLLUTION	0	0	0	0	0	1	1
OPERATING WITHOUT A PERMIT	0	0	0	0	0	1	1
PUBLIC HEALTH OFFENSES, CHAPTER 16	0	0	0	0	0	2	2
<b>TOTAL POLLUTION</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>

#### FORESTRY

ILLEGAL BURNING	10	7	14	2	6	6	45
ABANDONING A FIRE	2	1	2	3	1	0	9
PERMITTING A FIRE TO ESCAPE	4	1	2	0	1	1	9
FAILURE OF RR COMPANY TO CLEAR RIGHT-OF-WAY	0	0	0	0	0	3	3
VIOLATIONS OF GINSENG REGULATIONS	1	0	8	14	24	0	47
OTHER FORESTRY VIOLATIONS	4	4	3	1	7	8	27
<b>TOTAL FORESTRY</b>	<b>21</b>	<b>13</b>	<b>29</b>	<b>20</b>	<b>39</b>	<b>18</b>	<b>140</b>

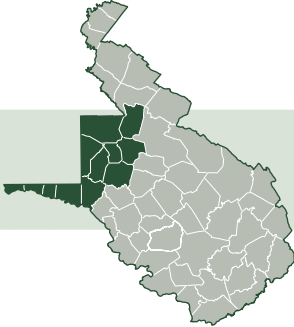
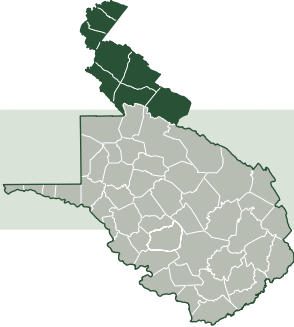
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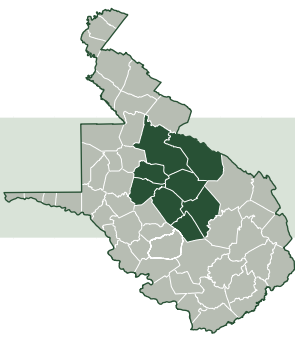
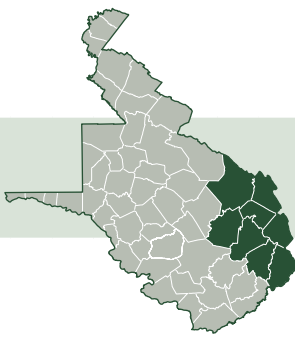
VIOLATION OF PARK REGULATIONS	8	3	3	0	4	13	31
WITHHOLDING INFORMATION	8	2	1	1	11	0	23
OBSTRUCTING,HINDERING, OR INTERFERING WITH OFFICER	3	6	2	0	1	9	21
CONSPIRING IN A VIOLATION OF CHAPTER 20	67	15	14	0	17	33	146
OFFENSE OUTSIDE CHAPTER 20	51	105	37	11	17	36	257
VIOLATION OF NATIONAL FOREST REGULATIONS	0	0	1	0	0	0	1
DRUG RELATED VIOLATION	9	13	4	3	0	2	31
CAPTIVE CERVID VIOLATIONS	0	0	0	0	0	1	1
WMA VIOLATIONS	10	87	8	0	10	5	120
CONSPIRING IN A FISHING VIOLATION OF CHAPTER 20	5	1	2	0	1	0	9
MISCELLANEOUS VIOLATIONS	2	17	12	6	17	21	75
<b>TOTAL GENERAL</b>	<b>163</b>	<b>249</b>	<b>84</b>	<b>21</b>	<b>78</b>	<b>120</b>	<b>715</b>

<b>TOTAL ALL PROSECUTIONS</b>	<b>792</b>	<b>830</b>	<b>747</b>	<b>233</b>	<b>1034</b>	<b>797</b>	<b>4433</b>
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## PROSECUTION PROGRAM BY DISTRICT FY 2014-2015

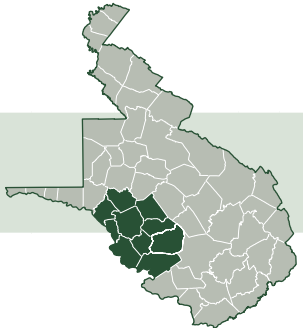
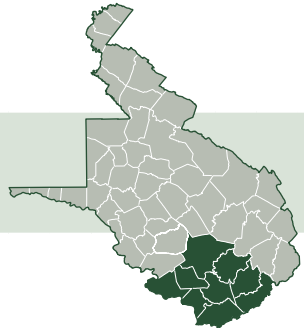
DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions				
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR	
<b>ONE</b>		<b>859</b>	<b>833</b>	Barbour	60	\$2,255.00	\$10,549.50	58	2	0	0
				Brooke	47	\$2,242.75	\$6,510.20	41	4	2	0
				Hancock	27	\$1,455.00	\$4,246.25	26	1	0	0
				Harrison	106	\$6,715.00	\$14,787.70	91	13	2	0
				Marion	115	\$4,995.00	\$15,358.25	93	19	3	0
				Marshall	29	\$1,075.25	\$4,026.25	26	3	0	0
				Monongalia	93	\$3,363.90	\$14,818.85	90	3	0	0
				Ohio	56	\$1,550.00	\$7,071.00	44	12	0	0
				Preston	114	\$6,670.00	\$16,705.75	103	11	0	0
				Taylor	28	\$1,550.00	\$4,011.25	25	3	0	0
				Tucker	83	\$5,959.75	\$11,187.15	68	12	3	0
				Wetzel	33	\$2,015.00	\$4,967.75	31	2	0	0
				<b>TOTAL DISTRICT 1</b>	<b>791</b>	<b>\$39,846.65</b>	<b>\$114,239.90</b>	<b>696</b>	<b>85</b>	<b>10</b>	<b>0</b>
				<b>TWO</b>		<b>860</b>	<b>379</b>	Berkeley	93	\$3,763.75	\$12,023.75
Grant	90	\$5,914.50	\$13,471.00					84	5	0	1
Hampshire	180	\$5,329.00	\$22,474.60					137	39	0	4
Hardy	151	\$7,840.25	\$18,959.80					116	31	0	4
Jefferson	148	\$5,562.98	\$19,975.80					121	6	0	21
Mineral	70	\$3,008.75	\$10,105.75					64	5	1	0
Morgan	37	\$1,041.75	\$5,443.50					33	1	0	3
Pendleton	70	\$4,740.00	\$10,576.50					67	2	0	1
<b>TOTAL DISTRICT 2</b>	<b>839</b>	<b>\$37,200.98</b>	<b>\$113,030.70</b>					<b>697</b>	<b>96</b>	<b>2</b>	<b>44</b>

DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions				
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR	
<b>THREE</b>	<b>946</b>	<b>1,176</b>		Braxton	124	\$3,599.86	\$18,559.75	112	9	0	3
				Clay	36	\$1,206.00	\$4,326.75	26	6	0	4
				Lewis	138	\$4,922.00	\$17,668.08	101	13	0	24
				Nicholas	191	\$9,040.75	\$25,598.00	153	36	0	2
				Pocahontas	47	\$2,505.00	\$7,097.75	43	2	0	2
				Randolph	78	\$3,730.50	\$11,703.40	73	1	0	4
				Upshur	74	\$4,980.00	\$10,929.15	73	1	0	0
				Webster	45	\$6,934.01	\$7,004.75	39	5	0	1
				<b>TOTAL DISTRICT 3</b>	<b>733</b>	<b>\$36,918.12</b>	<b>\$102,887.63</b>	<b>620</b>	<b>73</b>	<b>0</b>	<b>40</b>
				<b>FOUR</b>	<b>734</b>	<b>1,312</b>		Fayette	24	\$420.00	\$1,442.25
Greenbrier	75	\$1,670.00	\$5,930.85					38	30	0	7
McDowell	38	\$725.00	\$1,954.55					13	13	5	7
Mercer	46	\$1,011.00	\$3,972.60					25	10	0	11
Monroe	0	\$0.00	\$0.00					0	0	0	0
Raleigh	5	\$400.00	\$827.00					5	0	0	0
Summers	32	\$900.00	\$3,685.50					23	7	0	2
Wyoming	26	\$1,280.00	\$3,725.50					22	0	0	4
<b>TOTAL DISTRICT 4</b>	<b>246</b>	<b>\$6,406.00</b>	<b>\$21,538.25</b>					<b>135</b>	<b>65</b>	<b>5</b>	<b>41</b>





DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions			
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR
<b>FIVE</b>	1,812	2,810	Boone	145	\$5,210.00	\$20,998.25	130	13	0	2
			Cabell	119	\$1,110.00	\$5,328.00	32	82	0	5
			Kanawha	197	\$1,150.15	\$7,210.50	45	144	0	8
			Lincoln	49	\$1,665.25	\$3,690.75	23	26	0	0
			Logan	94	\$2,100.00	\$8,523.75	53	40	0	1
			Mason	122	\$3,849.25	\$16,670.25	102	18	0	2
			Mingo	65	\$1,320.00	\$7,052.25	44	21	0	0
			Putnam	83	\$1,466.50	\$7,697.00	48	20	0	15
			Wayne	154	\$380.00	\$2,244.00	14	123	0	17
			<b>TOTAL DISTRICT 5</b>			<b>1028</b>	<b>\$18,251.15</b>	<b>\$79,414.75</b>	<b>491</b>	<b>487</b>
<b>SIX</b>	1,041	895	Calhoun	95	\$2,510.00	\$8,627.75	51	44	0	0
			Doddridge	16	\$510.00	\$2,964.00	16	0	0	0
			Gilmer	18	\$135.00	\$961.50	6	12	0	0
			Jackson	196	\$3,560.00	\$20,360.70	121	72	0	3
			Pleasants	6	\$1,060.01	\$641.00	4	2	0	0
			Ritchie	50	\$1,190.00	\$6,509.50	38	11	1	0
			Roane	75	\$4,094.50	\$11,802.25	69	6	0	0
			Tyler	1	\$0.00	\$160.25	1	0	0	0
			Wirt	57	\$1,894.50	\$8,642.90	52	5	0	0
			Wood	282	\$7,950.00	\$36,433.95	229	51	0	2
<b>TOTAL DISTRICT 6</b>			<b>796</b>	<b>\$22,904.01</b>	<b>\$97,103.80</b>	<b>587</b>	<b>203</b>	<b>1</b>	<b>5</b>	
<b>STATE TOTALS</b>	<b>6,252</b>	<b>7,405</b>		<b>4433</b>	<b>\$161,526.91</b>	<b>\$528,215.03</b>	<b>3226</b>	<b>1009</b>	<b>18</b>	<b>180</b>







# Parks and Recreation Section



## Parks and Recreation Section

Samuel A. England,  
Chief

Brad R. Reed,  
Deputy Chief

## OVERVIEW

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The mission of the DNR Parks and Recreation Section as described in state code is to “promote conservation by preserving and protecting natural areas of unique or exceptional scenic, scientific, cultural, archaeological, or historical significance and to provide outdoor recreational opportunities for the citizens of this state and its visitors.”

The system is composed of 35 state parks, seven state forests, five wildlife management areas, the Greenbrier River Trail, and the North Bend Rail Trail. The parks section manages or assists in managing over 191,000 acres of public land and sees up to 7 million visitors annually in locations as diverse as undeveloped natural areas to multifaceted resort parks. The park system manages 1,948 campsites, 795 lodge rooms, 354 cabins, six golf courses, an early 20th-century-era railroad and logging town and an Ohio River sternwheeler. The system offers a tremendous variety of recreational and vacation opportunity and is a cornerstone of West Virginia’s very significant tourism industry. Use of state parks is free or low-cost, plus they are sources of employment and recreation that might not otherwise be available in rural areas. Our state’s visitors find West Virginia State Parks to be among the nation’s finest state park vacation destinations. According to the Outdoor Industry Association, outdoor recreation has grown by double digit percentages in recent years compared to an average 2 percent growth in other industries and outdoor recreation was responsible for \$646 billion in national sales, \$79.6 billion in tax production and 6.1 million jobs. The West Virginia State Park system helps make our state a leader in outdoor recreation and the associated economic gain it provides.

Further, the benefits of a state park system cannot be weighed on economics alone. As former National Association of State Park Directors President Joe Elton stated, “Our state parks are not just a lifestyle, they’re something each American owns. We all have a stewardship responsibility. They are one of the few places where people of every economic class, race, religion and ethnic background can enjoy life enhancing experiences with family and friends. They are places worth fighting for and must be preserved.”

In addition, conservation values are modeled within and encouraged by the park system. State parks and state forests protect watersheds and wildlife habitat, provide hunting, fishing and natural education opportunities and numerous other environmental and cultural benefits.

## GENERAL INFORMATION

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### Self sufficiency

Park managers endeavor to make the system as fiscally self sufficient as possible while at the same time protecting the overall mission and resources associated with the system. The West Virginia state park system continues to be one of the more operationally self sufficient in the nation even though it is one of the few not charging entry fees. However, it is challenging to maintain this performance due to factors beyond the control of system managers.

The downturn in the economy in the southern areas of the state has had a significant impact on revenues at facilities in that area. At the same time, other areas of the state have seen an upswing resulting in positive revenue impacts. These gains, unfortunately, were not significant enough to overcome the losses in economically slow areas.

Administrative fees paid to other state agencies have grown tremendously over the past several years. Likewise, minimum wage increases, Affordable Care Act requirements and employee benefits costs have contributed to the greatest increase in operational costs. Utility costs increases continue to contribute to the growing operational costs as well. Governmental group conference business has also

suffered throughout the lodging industry as governments at all levels make cutbacks. Additionally, the supply of available lodging has significantly grown in the past decade, creating many more options for overnight stays throughout the state.

Parks are also feeling the effects of shortened summer vacation seasons in the public school system. This has especially impacted the early and late summer midweek use of all our areas. It is also significantly impacting the recruiting and hiring of summer help as many of these staff members are students or educators and the time they are available for summer employment is more limited.

The needed expansions and improvements at Twin Falls, Blackwater, and Canaan Valley have proven to be wise investments. All three areas have seen increased revenues and greater guest satisfaction. The new sled run with snow-making ability at Blackwater, has been a popular improvement, with the facility experiencing many sold out sessions. The opening of the Seneca State Forest Fire Tower for overnight stays provide a unique attraction as it is the only fire tower on the East Coast to offer this service. The fire tower has been very popular and was mostly sold out for the season soon after reservations began.

The rail operation at Cass was transferred to the State Rail Authority for operation in January 2015. In addition to offering the Parks and Recreation Section a significant savings from the operational subsidies, the current operator has access to a business plan and funding which are unavailable to the agency. To date, rail operations have met expectations.

Of course, direct revenues do not measure the full economic benefit of the park system.

## Funding

Funding sources for the park system include Account 0265 (General Revenue), Lottery Account 3267, Special Revenue Account 3265 (Park Operating Fund) and Lottery Account 3277 (Park Improvement Fund). The FY16 total of all accounts will equal \$42,805,538. The General Revenue appropriation in FY16 is \$13,309,817 and is used solely for classified service salaries and benefits for the majority of fulltime staff within Parks as well as a few DNR Administration Section personnel who are charged to Parks due to their role in support of park administrative efforts. Lottery Account 3267 funds in FY15 were \$2,244,913 and are also used for Parks salaries and benefits plus a small portion legislatively dedicated to the Prickett's Fort Foundation. Special Revenue Account 3265 is projected to utilize \$21,953,957 in FY16 from park revenue-producing operations (facility use fees, lodging rentals, golf greens fees, camping fees, swimming fees, etc.) and is primarily used to fund current expenses (vehicle expenses, utilities, items for resale, etc.), hourly employee expenditures, fees paid to other agencies as related to park operations (OT and DOP fees), [a significant and growing number of full-time personnel] plus benefits and a few other miscellaneous categories of expenditures. \$296,851 in Lottery funds were also dedicated to park advertisement in FY16. Lottery Account 3277 monies amount to \$5 million per year. Of this, some \$3,403,850 is used for routine repairs and the remaining \$1,596,150 for equipment replacement and major repair to aging infrastructure.

The need for at least \$3 million in additional funding for major repairs and equipment replacement is the biggest need relative to the long-term viability of a large segment of the park system. Three-year budget plans for major R&A and equipment replacement are updated annually. Parks' Engineering Section just updated the assessment which details \$3.4 million in immediate repair needs, \$23.1 million in short-term (two to three year) repair needs and \$19.5 million in less critical deferred maintenance items. Examples include McKeever Lodge structure and plaza repair, North Bend sewage treatment plant replacement, and the Twin Falls pool/Pro Shop building replacement.

Parks Operating Fund (3265) had been rendered very unstable since FY09 by a combined onslaught of administrative fees from other agencies, unfunded employee benefit cost increases for programs such as





PEIA, across-the-board cuts in 0265 and 3267 which were not accompanied by any allowance of facility cutbacks, minimum wage increases and the funding of agency costs for the Affordable Care Act. This has necessitated the shift of numerous full-time benefit earning employees to 3265 over the past several fiscal years. A Supplemental Appropriation in FY13 and ongoing Improvement Level Appropriations of \$2,867,282 in General Revenue Account allowed the movement of 70 full-time employees back to those accounts to ease the burden on 3265 and restore its stability.

### **Sales and Revenue**

State Parks and Recreation Section finally realized significant recovery of the decreases in revenues observed since 2009. Revenue production from park facilities was up by nearly \$1 million in FY15 compared to the previous year, but was down just more than \$600,000 compared to FY09 record benchmark. However, the loss of revenue that would have been received from Cass rail operations (half year) and the Blackwater restaurant concession total nearly \$1 million. Considering this loss of revenue, and subsequent gains realized from no longer subsidizing both operations, the Parks System has comparatively exceeded FY09 revenue levels.

Revenue production in state parks is led by five major sales centers. These are lodging, cabins, food and beverage, camping and gift shop sales. Taken together, these facilities/services bring in approximately 76 percent of the park system's annual operating revenues. That being said, we challenge and incentivize facility managers to be aggressive and creative in developing new ideas for revenue production and refining and improving on old ones. During the past year, staff worked hard creating and implementing packages and value-added incentives to improve occupancy and revenue at our overnight facilities. Superintendents at cabin parks have worked to evaluate out-of-date reservations policies, matching them to the current expectations and needs of the public. Intense public relations and trade/no cost advertising efforts have been made to keep facilities current in the public eye.

As lodging is by far the park system's No. 1 revenue producer, special effort is always directed at these facilities, especially in the offseason. The lodge and resort district administrator has focused energies on creating a culture of hospitality expectations for lodge park staff. Awards are now being offered to the areas with the greatest improvements in hospitality. Additionally, an effort of upgrading and branding room amenities system wide has been started. Weekly conference calls with superintendents, lodge managers and conference service staff were initiated and focus efforts on conference recruitment, group sales, cross-selling and hospitality standard improvements. The challenge is to attract offseason, midweek business to supplement the typically brisk business at other times. Email campaigns and social media tools have made a difference in bringing exposure to facilities and special events/pricing. The system's chief naturalist/activity programmer is also heavily involved in sales and promotions.

### **Infrastructure Improvements**

Projects complete or substantially complete in the reporting time frame include: Babcock Mill Wood Shingle Roof Replacement, Beech Fork Trail & Parking Improvements, Berkeley Springs Old Roman Bath HVAC, Blackwater Lodge Second Floor Plumbing and Electrical Repairs, Blackwater Falls Emergency Replacement of 3 Utility Poles, Blackwater Falls Sled Run Snow Making System, Blennerhassett Island Museum HVAC, Blennerhassett Island Mansion Cooling, Cacapon Well Pump Replacement, Cacapon Cabins Water Pump ROTO-Phase Replacement, Cacapon Old Inn Restoration (on-going), Canaan Resort Outdoor Pool Filtration System, Chief Logan Lodge HVAC, Holly River Emergency Campground Power Repair and Primary Electric Service Replacement, North Bend Rail Trail Gas Line ROW Remediation, Stonewall Pathways, Decorative Crosswalks, Tygart Kitchen HVAC and Roof Repairs.

### **Administrative Management**

To support the 49 units that comprise the system in FY15, there were 427 full-time employees, approximately 1,607 hourly employees at the peak of seasonal employment, as well as staff for several



major park concessionaires. To meet administrative demands, Parks used five statewide general administrative personnel. These are a chief, a business manager and three district administrators. In addition, there are two technical program administrators in the form of an assistant chief in charge of Planning, Engineering and Maintenance (PEM), and a chief naturalist/activity programmer in charge of programming, interpretive services, special events, gift certificate sales, youth programs and various other special functions.

Field-based park superintendents direct natural resources, business personnel, public relations, law enforcement, maintenance, guest and employee safety, and other programs essential to their areas of assignment. These hard working, well-educated individuals are the key factor to success of the system's overall mission.

### **Americans with Disabilities Act (ADA) Compliance**

Most of the items identified in the original system-wide assessment are complete while smaller additional and ever-evolving needs remain. Cacapon lodge expansion will incorporate many ADA modifications.

### **Hazardous Dams**

The Dam Control Office of the Department of Environmental Protection has declared dams on several areas, including Blackwater Falls, Cacapon Resort and Tomlinson Run State Parks, as being potentially hazardous structures. Both Cacapon dams are to be repaired with funds made available for the project by the Wildlife Resources Section of DNR. As a state statutory requirement, a monitoring and evacuation plan is kept current for each major dam within the system.

### **Resource Management**

State park and forest superintendents are commissioned as Special Natural Resource Police Officers and possess full law enforcement authority on the areas they manage. Consequently, game and fish law infractions, littering violations, and enforcement of other environmental laws are routinely conducted. All superintendents and key supervisory personnel are required to attend the West Virginia Division of Forestry's annual Wildfire Control Training school, and suppression action is taken on any forest fire that occurs on or threatens state lands. The Parks' Section cooperates with the State Department of Agriculture and the Division of Forestry in controlling Gypsy moths, hemlock wooly adelgid, emerald ash borer and other insects and diseases. Routine trail and boundary maintenance is carried on throughout the year.

### **Programs**

Park and forest programming and activities focuses on the natural environment and history of specific areas and West Virginia in general, as well as providing events that attract visitors for both day-travel and overnight use and ridership/admission to unique settings found within the park system.

Summer activities and events concentrate largely, but not exclusively, on interpretation of flora, fauna and natural history. Programmers and naturalists are charged with implementing summer activities to include hikes, wildlife observation, water study, etc., and to engage visitors in discovering and understanding the outdoors through interpretative interaction.

Energizing and encouraging families to get outside is a priority. Year-round programmers are on-site at six state parks (Cacapon, Pipestem, Twin Falls, Tygart Lake, North Bend and Blackwater Falls) with year-round lodges and include nature-based activities through hikes, nature center visitation and special weekends. Special summer programs also include entertainers and presenters. Seventeen parks or forests employ an hourly wage summer naturalist. These front line ambassadors often introduce visitors to West Virginia's natural heritage and character of the state for the first time.



Special event and entertainment examples include Mansion by Candlelight at Blennerhassett Island, 18th century encampments, Civil War reenactments, National Trails Day and First Day Hikes, special programs such as Three Rivers Avian Center and Geology Programs, amphitheater shows, hosting events such as road races and other specialty interests.

Special events on weekends or extended stays generally include an overnight lodging component plus food, entertainment and an educational focus. Special packaged events are generally scheduled on weekends and in the shoulder seasons or winter months to attract visitation and support revenue production. Examples include Nature Wonder Weekend, Astronomy Weekend, Winter Wonder Weekend, photography workshops, quilting weeks/weekends/shows, craft weekends and more.

Programming is incorporating more “build an experience” focus by offering outdoor activities as an add-on to a visit or stay. Examples are Quest at North Bend State Park, day camps at Pipestem, and youth/family events such as Hooked on Fishing or JAKES Day at select areas in cooperation with outside organizations.

Activities and events are posted to the park system’s website on a full-calendar as well as individual area pages when scheduled and confirmed.

## **INDIVIDUAL AREA AND SECTION ACTIVITY REPORTS**

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West Virginia parks, forests, and wildlife management areas differ from those in most other states because of their added role in filling a local recreational niche occupied elsewhere by local government. Local communities in West Virginia often cannot afford to provide the recreational opportunities such as tennis courts, swimming pools, picnic areas and similar items that are a primary responsibility of city and county government in other states; so over the years this function has come to be expected from local state parks.

Because of this and other factors, requirements for maintaining the individual parks, forests, and wildlife management areas are quite varied. Facilities range from the resort development at parks like Canaan, Pipestem and Stonewall to historical structures dating from the Civilian Conservation Corps (CCC) days. Replacement and upkeep of aging infrastructure at various areas is a constant challenge. This section of the annual report will focus mainly on repair and improvement items since the common themes of self-sufficiency, programming, and similar management challenges are described elsewhere.

### **Audra State Park**

Electric service was installed on four more sites bringing the total to six electric sites at Audra. Four grills were replaced in the campground. Sections of the Alum Cave Trail boardwalk were replaced. Traffic control posts along the campground road were replaced. Heavy rains brought flash flooding to the campground area with a number of riverside sites damaged. Repairs included restoring the sites, spreading gravel and other cleanup. The campground road was also damaged and was repaired by the local WVDON detachment.

### **Babcock State Park**

Several dead trees were removed from the picnic areas and other locations throughout the park. Two new cabin woodsheds were constructed and put into use in the cabin area. The Manns Creek restroom facility was repainted on the inside, and a new coat of stain was also applied to the outside of this facility. DSL Internet service was installed and extended to the campground check-in station building which provides Wi-Fi Internet connectivity for campground guests near the facility. Two memorial benches were purchased by park patrons and installed at the overlook area. Several charcoal grills



were fabricated and installed to replace deteriorating ones at several cabins and in picnic areas. The new Sugar Camp Run playground structure, complete with swings, signage, and ADA accessible walkway was constructed. Babcock State Park hosted both the 11th Annual Gristmill Grinder Trail Run and the First Annual Sticks and Stones Trail Run. Major repairs were made to the old sewage treatment plant that treats the swimming pool and the Boley Lake restroom wastewater. Two cabins received extensive bathroom renovations that included removing the entire bathroom floor down to the original log beams, replacing joists and underlayment, and installing new vinyl flooring and trim. New vinyl flooring was installed in Cabin 22. A telephone line was installed, and a new credit card machine was put into service at the boat dock rental facility. A new gasoline storage building was constructed to house the bulk gasoline storage tank.

### **Beartown State Park**

Beartown continues to be a much-loved natural area and favorite attraction for local residents and out-of-town visitors. Visits from school groups, motor coach tours, families and individual tours were frequent throughout the year and many favorable comments were received. Even in winter, there was rarely untracked snow on the entry road or boardwalk. Maintenance operations during the year were mostly boardwalk repairs, adelgid-killed hemlock tree removal, cutting back roadside brush, painting, restroom maintenance and litter control.

### **Beech Fork State Park**

The Overlook Hiking Trail was renovated to US Forest Service specifications. Reinforced concrete entrance ramps were built to repair road damage from garbage trucks emptying dumpsters. The swimming pool walls were repaired and the pool was painted. A new boat rental station was constructed. Two cabins had their floors refinished. Uneven walkway pavers at park headquarters were reset. Several acres of invasive autumn olive were removed from park. The annual spring cleanup was held April 4, 2015, with 55 volunteers gathering 134 bags of trash and nine tires. Wi-Fi service was installed to the cabins. The new online reservations system for vacation cabins was put in operation, and online campground reservations were extended to be available a year in advance.

### **Berkeley Springs State Park**

The large project for the year was the replacement of the HVAC system in the Old Roman Bathhouse. The Town of Berkeley Springs received a Streetscape Grant which will fund construction of new steps into the park, removal of old hedges, replacement of sidewalks and grading the northern portion of the park to be level with Fairfax Street. A new three-year contract to pump bulk water was awarded to Berkeley Club Beverages, a local bottling company. The Berkeley Springs State Park Emergency Action Plan was developed and distributed to local authorities. An automatic external defibrillator was purchased and installed in the Main Bathhouse. Maintenance staff attended a boiler maintenance school. The park hosted a wide variety of community events throughout the year including the 41st Annual Apple Butter Festival, concerts, car shows, art shows, weddings and pool parties.

### **Berwind Lake Wildlife Management Area**

The annual Kids Fishing Day conducted by the Berwind Anglers Club set a record with more than 500 children fishing and overall attendance close to 1,500. The Big Creek High School moved their yearly reunion to the area and brought in close to 600 attendees. The event was a huge success and the group has already booked for next year. The combination of heavy snowfall followed by endless rain in the early parts of the year caused significant flooding in the park, resulting in erosion issues and uprooted benches around the lake. Two major construction projects were completed: a new metal roof on the park headquarters building as well as a complete overhaul of the pool concession stand. Other minor projects included a new small footbridge on the Overlook Trail, painting restrooms and new sun decks for the pool.



### **Blackwater Falls State Park**

It was a notable year for the sled run operations as, for the first time, the facility had snow-making capabilities on the hill. This allowed the facility to be opened on a regular schedule throughout the season instead of as weather permitted. The conveyor lift, added last year and the snow-making operation made for a 215 percent increase in revenue at the sled run compared to FY14. Large snowfalls allowed for other winter activities throughout the season. The lodge was closed from March 1 through April 30, 2015, to allow for major repairs to the second floor utilities. All of the water lines to the rooms were replaced and relocated from the attic space to the interior of the building. A drop ceiling was installed in the hallway. The electric service was upgraded, and new circuits were added to allow for each room to be on its own circuit. During the closure, the restaurant and menu at the lodge were revamped. The restaurant was renamed The Smokehouse and is specializing in barbecue fare. The park hosted the 54th Annual West Virginia Wildflower Pilgrimage in May.

### **Blennerhassett Island Historical State Park**

Due to a significant increase in demand for evening activities and functions, staff worked to create policies for weddings, charters, tour groups and school groups in an attempt to make these guests visits/experiences more memorable. Newer special events such as Tea Tuesday and dinner cruises blossomed while old classics such as Island Frolic seemed to have declining interest. With a grant procured by the foundation, staff began work on a circular feature within the informal garden area at the Mansion. Staff replaced a motor on one of the pontoon boats while the other boat required repairs for a hole caused by heavy ice on the Ohio River. The Island Belle Sternwheeler added a new fire pump to comply with U.S. Coast Guard requirements. New HVAC systems were put in place in the museum, mansion and gift shop.

### **Bluestone State Park**

Construction of the new Pit Area access road began this fiscal year. The 2015 Travis Pond Boat Races were held on Bluestone Lake. Racers and spectator numbers were very high and plans are underway to host the 2016 Nationals. A cabin air conditioning project began with the installation of wall units in all three-bedroom cabins. Sidewalks were paved to two cabins and four cabins were stained. Wi-Fi services were added to the Park Headquarters and laundry. The Park Headquarters and Gift Shop were remodeled. Garage doors were replaced at the Maintenance Shop. A 20-foot floating courtesy/fishing dock was constructed in the Pit Area.

### **Bluestone Wildlife Management Area**

Most of the year was spent on routine maintenance on all area campgrounds and roads. The staff cleaned up after winter/spring flooding which also damaged two boat docks in the Bertha Area. Brush was cut back from roadsides and along campground fields. Doors were replaced on pit toilets in campgrounds. New picnic tables were placed on the area. The plumbing at the pavilion was replaced, and the facility was painted. Campground improvements including grading roads at Bull Falls and roofing the pay booths at Shanklin's Ferry and Bull Falls. The fence at the office was replaced. Drainage improvements included installing a culvert at Keatley's Campground to try to alleviate a standing water problem, and clearing ditches and culverts.

### **Cabwaylingo State Forest**

Extensive renovations were completed on the superintendent residence. The roof structure of the Crum-Morgan Picnic Shelter was repaired and a new metal roof was installed. A new heater was installed in the assistant superintendent residence. The office restroom was renovated. The severe winter weather resulted in some downed trees and frozen and burst water lines.

### **Cacapon Resort State Park**

The final phase of the Old Inn renovation was completed with the replacement of logs in several areas, foundation repairs, rewiring the entire building, re-roofing, new gutters, landscape drainage and



replacement of the west end exterior staircase. The exterior of the building was also addressed with chinking replaced as needed, and the entire facility stained. The exterior basement stairwell was fenced in for safety, and the main electrical panel was relocated. Two cabins and the tennis court building were re-roofed. Drainage improvements continued on the golf course. A tree planting program funded by the park foundation included many native flowering trees planted in the picnic areas, at the Old Inn, and along the road to the stables.



### **Camp Creek State Park**

Some of the major projects completed by staff included continuing to develop a Pack-In, Pack-Out campsite in the forest, installing five grills at the primitive Blue Jay Campground, installing metal roofs on the residence and three shelters, and remodeling the office/gift shop and the check-in building. Staff also worked with the Division of Forestry, DNR Wildlife Resources Section and the National Wild Turkey Federation to put more emphasis in the habitat areas of the forest. These in-depth wildlife habitat improvements have dramatically increased the recreational value of the forest. The park foundation started a new event, Ramp Feast, in April. With financial assistance from the park foundation, staff was able to complete several other projects, including electrical upgrades to shelters and renovating two shuffleboard courts at the shelter area. Additional work included upgrading four more sites in the modern Mash Fork campground and building a new swing set/ fire pit adjacent to the campground check-in building.

### **Canaan Valley Resort State Park**

Canaan Valley Resort State Park received more than \$35 million in 2011 in bond appropriations for renovations to the lodge, conference center and ski area. The project is complete with the exception of the razing of the three remaining 50-room units, scheduled for the spring 2016. The end of the 2015 fiscal year marks the first full year of the new Management Contract between the Division of Natural Resources and U.S. Hotel and Resort Management. The new management company and the agency faced many challenges during the first year including operational, financial, staffing and the ever-changing weather conditions. The park is currently staffed with a solid team. Operations and financial performance are consistently improving.

### **Carnifex Ferry Battlefield State Park**

The park hosted the first re-enactment since the 150th anniversary event in 2011. The event had fewer re-enactors participating, but it was still well received by the community. Wood-burning stoves/furnaces were installed in all park structures to supplement the heating systems. This resulted in a substantial drop in the utility bills for the sign shop and the park office. The museum was rewired to accommodate a new 200-amp power service. The basement wall of the superintendent's residence was repaired, and new drains were installed to prevent future water infiltration. The Sign Shop staff produced 1,098 signs.

### **Cass Scenic Railroad State Park**

A new point-of-sale system was installed at the Company Store. New Wi-Fi access points were installed at the Park Office, Company Store and Depot, allowing for one gigabyte of service. Fiber-optic cable TV was installed in all Company House rental units, which allowed for the removal of all satellite dishes. A new metal roof was installed on the Leather Bark Ford Shops. All 20 of the Company House rental units' interiors were painted. Eight Company Houses had all external woodwork and porches repaired, with 10 Company Houses and six outbuilding exteriors painted. Company House #320 had extensive remodeling done to the interior including flooring, kitchen and bathroom. Twelve mature maple trees were donated and planted on Front and Main Streets. A fire ring and benches, along with new horseshoe pits, were installed at the picnic shelter area.



Special events hosted at the park this year included Cass Homecoming, Cass Logging Days, Harvest Day Weekend, Easter Egg Hunt, Great Train Race, Dinner and A Night Ride to Whittaker, Full Moon Runs to Bald Knob, Old Spruce Runs, Double Headers to Bald Knob, Dinner Trains, Halloween Train, Whistle Blow, Fall Photography Workshop Weekend, Fly Fishing Workshop Weekends, Irish Road Bowling and Cass Clean-up Day.

### **Cathedral State Park**

Staff completed several repair and enhancement projects including upgrades to the stone wall and landscaping boards at the park entrance. The parking blocks were painted and overhanging limbs were cut back from the roadways. All sign posts, fences and bulletin boards were repainted. The well pump and line had to be replaced due to several leaks inside the well casing.

### **Cedar Creek State Park**

The park staff upgraded 10 sites in the camping area. More than 1,500 feet of electrical line and conduit were installed along with new electric pedestals on each site. Water hookups, fire grills, and trash can holders were also installed. Renovations were made to the campground laundry/bathhouse. A new electric heater, exhaust fan, lights, and two windows were installed in both the women's and men's side. The engine was rebuilt on JD-301A farm tractor. The old foot bridge leading to the Walnut Picnic Area was taken down and a new one was constructed out of pressure-treated wood. The old gravel and sand medium in the filtration tanks at the swimming pool was replaced.

### **Chief Logan State Park**

The most significant ongoing project is the connector road that is being built between the park and the lodge and conference center. There have been several meetings held about this project and some work has been started. Upgrades were done to the amphitheater this year including new fencing around the entrance area and widening of sidewalks. The Liz Spurlock Amphitheater presented "Mamie," a true story about a local legend from the 1920s and 1930s involving her scandals. "The Addams Family" was another well-received performance at the park. Ground preparations began for the new restroom to be located at Shelter 3. Pickett fencing was installed around the superintendent's residence, steps were built to provide better access the pond in a steep area, benches were installed at the pond and pumps were replaced/repaired at booster stations. The Shawnee Living History Trail Associates donated the Pioneer Cabin located across from the amphitheater to Chief Logan State Park. Park staff will be responsible for the upkeep of the cabin as well as rental for special events. The park received two new male boars for the Wildlife Exhibit.

Chief Logan State Park Museum was the setting for a "Make-A-Wish Foundation" event. The young man wanted to visit southern West Virginia and ride the Hatfield McCoy Trail System as well as enjoy other experiences offered here. Park employees provided a tour of the Wildlife Exhibit and fishing in the pond. The park also hosted the Annual Sue Browning Wildflower Hike, Aunt Jennie Wilson Music Festival, Civil War re-enactment and Christmas in the Park.

### **Chief Logan Lodge**

In its ninth year of operations, facility management worked and planned closely with administration to increase revenue and find creative ways to become self-sufficient once again in spite of the impact of diminished local economies. A stabilization of revenues was achieved and is showing slow but sustainable signs of recovery. Management continues to work with the local chamber of commerce, county commission, convention and visitors bureaus and many other organizations to increase tourism opportunities for the area.

Staffing the facility remained a challenge, both for seasonal and full-time positions. Several key seasonal leadership positions remained vacant for lack of suitable candidates. Finding adequate

seasonal staff to maintain the restaurant facilities and provide the expected upper scale guest services is a significant challenge.

The Chief Logan Recreation Center continued to provide lodge guests and the community with a variety of recreational activities. The eight-lane Olympic-size competition swimming pool served as a significant selling point in attracting business to the lodge as it is one of the few pools in the state that is suitable for competition with lodging adjacent.

### **Coopers Rock State Forest**

A new bridge was constructed leading from the parking lot to Shelters 3 and 4. New area-specific maps were installed at all trailheads with information relating to that trail, as well as information on elevation, GPS coordinates, length, description and emergency contact numbers. Picnic area fireplace/grills built by the Civilian Conservation Corps (CCC) in the late 1930s and located near Shelter 3 started receiving much-needed restoration this year. The Coopers Rock State Forest Foundation took on this project and funded the restoration through grants. Five of the fireplaces were restored to their original form in the first phase of the ongoing project that will continue over the next few years. New parking areas were established near the overlook to alleviate some of the parking issues created by heavy use of this area. These same parking areas help in the offseason providing needed parking for hunters. Shelter 4, which is a CCC-constructed log picnic shelter, received restoration this year. The roof was repaired and re-shingled and the logs were re-stained.

### **Droop Mountain Battlefield State Park**

Facility maintenance activities included refurbishing or rebuilding stone water fountains, rebuilding the west overlook, replacing the residence furnace, replacing siding boards, painting picnic area toilets, replacing the water system chlorinator, completing various building and equipment repairs, and making several minor electrical repairs. Grounds maintenance activities included removing nearly 100 adelgid-killed hemlock trees along the entry road, clearing brush and limbs from roadways and lawns, leaf removal, lawn maintenance and firewood processing. Hiking trails were cleared several times by both volunteers and park personnel. Programming activities included many school groups, motor coach tours, nature and historical talks and walks, and hundreds of individual tours.

### **Greenbrier River Trail**

WVDOH replaced 30 additional directional signs along Route 219 in Greenbrier County. The trail crew installed 18 hitching posts at trailside restrooms and other locations along the trail. Using a recently purchased tractor with a boom-arm mower, 20 miles of trail were cleared of heavy brush and saplings that were encroaching on the pathway. Eight miles of the trail were resurfaced by using a road grader to level and re-crown the existing gravel surface before spreading new crusher run.

### **Greenbrier State Forest**

The Youth Conservation Corps Trail rehab/rebuild was completed. The 2.1 mile Old Fields Loop A Trail was completed. All trails were blazed with 4-inch poly blazes and poly/fiberglass trail markers were installed at all trail intersections and trailheads. A bike wash station was built with funding provided by the Forestry Division. A gas line break was capped and new line was re-routed. The water system supplying the residences/office/maintenance area was replaced and upgraded. Four cabins received kitchen renovations including new cabinets, countertops, plumbing and flooring. These cabins, along with two others, also received new flooring in the bathrooms and repairs to the subflooring. New grills were installed at eight cabins. All of the campground bathhouse water lines were replaced and new privacy partitions were installed in the pool bathhouse showers. Renovations were made to the assistant superintendent residence which included a new fence, bathroom and kitchen countertops and replacement of a wood stove with a gas log fireplace. A local church organized a volunteer day to clean up derecho damage to the archery range, and all shooting lanes were cleared as well as the





travel corridors between targets. Additionally, new range markers were set up for each target and many of the target sheds that had received light damage were improved. The 51st Annual Show-Me Hike (spring wildflower hike), Greenbrier County Scout Day Camp and the Civil War re-enactment of the Battle of White Sulphur Springs were hosted by the forest. Additionally, a PDGA sanctioned disc golf tournament was held in the forest.

### **Hawks Nest State Park**

The aerial tramway developed several maintenance issues and had to be closed to the public. It was determined that extensive electrical repairs to install a computerized electrical system were needed to remain operational. Construction began in May 2015 and was still ongoing at the end of the reporting period. While the tram was down, vans were rented and visitors were transported to and from the river to enable them to ride the Jetboat and enjoy the scenic New River. In March 2015, a slippage on Route 60 developed and caused debris to fall onto the Cliffside Trail. The trail was closed for safety and remained closed at the end of the fiscal year. As a preventative maintenance measure, the park replaced an outdated 12-ton electrical transformer at the lodge.

### **Holly River State Park**

The park is in the final stages of completion of an electrical upgrade to the 88-site campground, a project that included installation of new underground cable and site pedestals. Addition of a new gift shop and registration office to the park headquarters/restaurant building is set to be finished by late fall. The staff is still cleaning up debris resulting from Hurricane Sandy as limbs fall and trees succumb to damage. Large rocks and trees were removed from portions of the camping area to accommodate larger campers, a project that will continue during the fall season. The parking area for the restaurant was expanded to accommodate larger vehicles, and additional parking was added in rear of the building. Updates were made to the interior of both residences, including adding HVAC upgrades, insulation, painting and new flooring. Fences were installed around both residences.

### **Kanawha State Forest**

The bathroom at the assistant superintendent's house was remodeled. The summer naturalist provided weekly programs at the Nature Center, created geocaches and led nature hikes. In addition, 10 aquariums were acquired for the display of different animals than can be located within the forest. American Electric Power began a major project to upgrade their power lines through the forest and, as part of the project, made significant improvements to many of the secondary roads through the forest. A major land slip was fixed that occurred along one of the roads passing through the campground due to large amounts of rain in May and June.

### **Kumbrabow State Forest**

The Wildlife Resources Section worked along the Mill Creek native brook trout stream to replace habitat structures that were damaged during high flood water in October 2014. The restoration was completed in less than one month. The campground fire pits were replaced at all 13 campsites in Mill Creek Campground. Cabin exterior renovations began and will include screening cabin porches and painting. Trail work was completed on Meatbox and Potato Hole Trails. The trails were cleared, widened, and the process of renovating trail structures began. Trail work will continue into 2016.

### **Laurel Lake Wildlife Management Area**

Three different sets of steps were built to provide better access to the lake over the steep and difficult terrain. These steps allow fisherman better access to popular fishing sites. Lumber for the steps was donated by a local lumber company. The local company donated 3,500 board feet of lumber, a mix of red and white oak. All four existing horseshoe pits on the park were rebuilt and staff also built a new set near the pool. The project for installing electricity into two of the most popular picnic shelters was completed. One shelter along the lake shore was repainted, as was the office and part of the

maintenance garage. One of the playground facilities was re-mulched and an outdoor fire pit was installed near Shelter 2.

### **Little Beaver State Park**

Park's Engineering staff finished the first phase of the project on the park headquarters building, installing 30-year shingles and siding, which has improved the building immensely. An Eagle Scout project on the covered bridge at the headwaters of Little Beaver Lake included restoring the covered portion of the bridge and adding a fishing pier extension. The water and electric loop of the campground and main park road up to and past the second loop were paved. The campground continued to grow in occupancy and revenue.

### **Lost River State Park**

Many improvements were made to the park's facilities and grounds during FY15. A foot bridge that crosses Howard's Lick Trail along Dove Hollow Road was rebuilt. A foot bridge was also replaced next to Shelter 1. The shingles and gutters were replaced on the roof of Cabins 13 and 19. The shingles on the gift shop roof were replaced. Hazardous trees were removed around several facilities in the park. Several of the CCC-installed beams that were used as guard rails and parking lot borders were replaced. One of the park's pump houses for the water distribution system was renovated. Cabin maintenance included repairing or replacing windows, painting, re-roofing, replacing drain lines, flooring replacement, rewiring, refinishing hardwood floors, installing a new heating oil tank and fireplace repairs. The bathroom at the assistant superintendent residence was renovated, and old electrical wiring was replaced. New electric wiring was also installed at the park maintenance shop. The maintenance staff built several new picnic tables that were distributed throughout the park. The men's restroom at the administrative building was renovated. Several young White Oak trees were planted throughout the park with protective barriers around them. Fire rings were added to the yards of six cabins. Two new primitive campsites were established near the CCC shelter on Big Ridge. Solar lighting was installed to the roadside sign leading visitors to the park from Route 259. Two CCC built water drain headwalls were repaired. Several new grills were installed throughout the park picnic and cabin areas. The local convention and visitors bureau continued to include Lost River State Park in their efforts to promote the county's attractions and businesses.

### **Moncove Lake State Park**

Park staff built a much-needed footbridge on the Devil's Creek Trail using a memorial donation from a park patron. Staff also developed a primitive group campsite along the lake shore for use by organized groups such as Boy Scouts, 4-H and church groups. A DSL line and an outdoor wireless router were installed; now all sites in the upper campground have access to wireless Internet. Painting projects included the swimming pool bathhouse, wooden playground equipment, sign posts and the exterior of the campground office. Many wooden signs throughout the park were replaced with new plastic signs. The Union Lion's Club hosted their 4th Annual Kids' Fishing Derby in April with approximately 50 children in attendance. The Eastern Divide Chapter of the National Wild Turkey Federation (NWTF) hosted their 3rd annual JAKES Day youth event in September with approximately 75 adults and children in attendance.

### **North Bend Rail Trail**

Various locations received barriers to prevent vehicle access to the trail. Several slip repairs were made and portions of the trail surface repaired. This year, a previously awarded \$410,000 grant was applied as a match for another WVDOH grant to bring the total to \$1.03 million for drainage and surface work on the eastern end of the trail. Work is to begin in spring of 2016.





### **North Bend State Park**

Over the past four years, North Bend's lodge occupancy and revenue received a boost due to the strong growth of the natural gas industry in the area. That business segment grew and climaxed during calendar year 2014, producing the highest lodge occupancy levels ever recorded at North Bend. Since April 2015, multiple factors influenced a leveling off of the demand and growth of the industry, and occupancy numbers reflected the change in the market. The unprecedented growth not only produced record levels for last calendar year but also drove up the park's five year average, which will be noticeable in future years as more normal occupancies are compared to the record years.

Staff undertook a cabin renovation project that included refinishing the cabin floors, sanding all the interior walls, replacing bedroom carpeting and remodeling the bathrooms as needed. The electric system was replaced at Shelter 3. The old Country Store was gutted and reconfigured to be summer intern housing. With the assistance of the park's foundation, solar parking lot lights were installed at the boat ramp, and the miniature golf course was renovated.

### **Panther Wildlife Management Area**

The superintendent residence switched from gas heat and cook stove to electric due to failure of the gas well supplying the facility. The office bathroom floor was replaced. The pump house supplying the pool, office, and residence was updated with a new pressure tank and a pump funded by the Wildlife Resources Section. A local contractor volunteered to remove many old tree stumps from the picnic areas. The trail to Buzzards Roost Overlook was cleared and reopened for the first time since 2007. A persistent water leak in the pool was corrected.

### **Pinnacle Rock State Park**

The rock stairway that is directly behind the playground, and the rock floor of the picnic shelter were repaired. The Mercer County Convention & Visitors Bureau placed two geocaches on the park. Repairs to the restroom facilities at the shelter included new faucets and new drain pipes. The horseshoe pits were upgraded with new railroad cross ties. The horseshoe stakes were painted and new sand was added to the pits.

### **Pipestem Resort State Park**

Four cottages were provided with new roofs. Woodsheds were constructed for cottages 14-26 and the Nature Center. Fire rings were constructed at all cottages. Carpeting on the Canyon Rim Center's outdoor plaza was removed, and in its place a waterproof paint system was applied to prevent water infiltration. Multiple park structure fire alarm panels were replaced.

A new bar and service counter was constructed for the Bluestone Dining Room. Renovations at McKeever Lodge included replacement of the heating and cooling circulation lines and installation of new guest room sliding windows and doors. Both projects were still ongoing at the end of the reporting period. The landscaping within the lodge courtyard was renovated. Overgrown vegetation was removed and replaced with new plantings, topsoil was brought in, a gas fireplace erected, and concrete steps were constructed for guest rooms 412, 414, and 416 to be able to directly access the courtyard. Stone paved walkways and an accessible entry ramp were installed. A deer fence at the mouth of the courtyard was completed to allow vegetation to thrive, and patio furniture was purchased for this court yard by the park foundation.

A new picnic shelter near Park Headquarters was completely funded by the Pipestem Foundation. A mini-golf restroom was constructed in cooperation with the Pipestem Foundation.

The International Bowhunting Organization Spring National Competition was held at Pipestem in April. Nearly 1,000 competitors participated, and many family and spectators filled the park. The park

developed partnerships with the Chuck Mathena Center for The Performing Arts in Princeton, as well as with the City of Bluefield and Bluefield Area Transit, in order to provide more recreational options for guests staying at Pipestem and to raise the park's profile and accessibility among local residents.

### **Plum Orchard Wildlife Management Area**

Roads required extensive maintenance and repair after heavy rains and flooding. Campground improvements included 24 new camp grills, 15 garbage cans, leveling of four sites and the addition of shrubbery between sites to increase privacy. The storage building roof was replaced. New dusk-to-dawn lights were installed on the dam, and vegetation was cleared for safety and compliance purposes. New mulch was added to the playgrounds. The superintendent continues to work with the Paint Creek Scenic Trails Association.

### **Prickett's Fort State Park**

Rail and fence repairs were made throughout the area. The Native American Area was improved with removal of an old storage shed and outside kiln and general cleanup. Debris piles from previous bay dredging were removed from the park. Other improvements included pressure washing of sidewalks throughout the area, replacement of cedar shingle roof on one blockhouse, and replacement of door jambs on the gun shop. Hickory flooring was installed in the library to match what was previously installed in great room. A new wildlife observation platform was constructed at the old boat launch area. The park hosted a full schedule of free concerts and welcomed the return of Fairmont State University Drama Department with a performance of "The Music Man" in the park's amphitheater.

### **Seneca State Forest**

Efforts this year concentrated on completing renovations to the fire tower. The fire tower cabin roof was replaced, a steel mesh trap door was installed at the top of the stairway, tongue and groove paneling was installed on the ceiling and walls above the windows, the interior and exterior of the cabin was painted, deck boards, handrails and stair treads were sealed, and vinyl floor covering was installed. The vault toilet and woodshed were completed and a picnic table pad with fire ring was built. The fire tower was opened for overnight rentals beginning June 20. Six wood gates received a coat of stain, as did the boat dock, fishing pier, oar/paddle storage box and benches at the lake. The wood structure of the bridge over the spillway also received a coat of stain. The water heater serving the shower house was replaced. DOH graded the cabin road and cleaned the ditches and culvert heads.

### **Stonewall Resort State Park**

For the 13th consecutive year, the resort attained the AAA-Four Diamond Award for excellence. The conference area received new flooring, wall coverings and furnishings. Future plans include similar renovations to the lodging facility. Land was prepared for the creation of the Appalachian Heritage Village, with expected delivery and reconstruction of the Fox Cabin by late 2015. The new cottage area infrastructure was completed, the road paved and the first cottage was under construction at the end of the reporting period. The marina was converted to seasonal operations with the first shutdown scheduled for October 2015 with all boats to be removed by the end of that month. The Kings Course, a modified shorter course, debuted at the golf course this year to cater to beginners or those with limited playing time. Sling Golf also began this year and is aimed to attract a new type of golfer.

### **Tomlinson Run State Park**

Five group camp buildings were repaired and painted. A new 300-foot sewage line was installed from the swimming pool bathhouse and concession stand to the main PSD sewage line. Two new hand dryers were installed at the swimming pool bathhouse. The maintenance staff installed new floors in the two 20 foot yurts. All of the support posts at Shelter 1 were found to be deteriorated and had to be replaced. Staff began working with PEM on designing and getting bids for constructing an ADA fishing access area at the lake.





### **Tu-Endie-Wei State Park (Point Pleasant Battle Monument)**

The park restrooms were scraped and repainted. New interpretive markers were placed that add to the professional appearance of the monuments. Arrangements were made with a local company that has volunteered to paint both 90 foot flag poles. All restrooms were refitted with PEX water pipe systems that should aid in keeping the cold Ohio River wind from freezing the pipes. A new zero-turn mower was purchased.

### **Twin Falls Resort State Park**

The back deck railings to 12 cabins were upgraded from horizontal boards to vertical pickets with top flat rails that continued down the steps. Nine cabin exteriors were painted and 10 cabins were painted inside. The front porch on Cabin 13 was removed and a new one installed with new steps and railing. Lighting was improved by changing ceiling fan light kits in several cabins. Shelter 2 underwent renovations that included concrete piers poured around each leg with stone laid over the concrete, a metal roof and painting. Shelter 3 was undergoing similar renovations. Renovations began at the former museum to convert it into a new nature center. The work includes a metal roof, new windows, exterior painting, removal of interior partitions to create a larger central room, partial new oak floor, new walls, new ceiling with LED lighting, a public restroom and office. Approximately 185 Dwarf Alberta spruce have been planted on the golf course. A new spray feature was installed in the pond near #18 green and a landscaped area at the #6 tee was developed and includes a large TF outland in landscape timbers and white gravel with pines planted in each corner. Construction of a spray/shower site near the outdoor pool was underway and concrete poured, but work was delayed by rain. The fabricated spray features, with retaining wall, will be installed for the 2016 season. Underground electrical service in conduit was installed for four cabins totaling two thousand feet of cable with each cabin having individual disconnects. At the Pioneer Farm, a new split-rail fence was built along the entrance road with new pickets around the garden and yard. Two abandoned water tanks were removed from the park.

### **Tygart Lake State Park**

A new HVAC system was installed in the lodge restaurant, which corrected a long-standing air circulation and cooling deficit. The roof in the general area of the kitchen and rooms 1-5 and 11-15 was replaced, which alleviated an ongoing problem with leaks. Several lodge rooms were upgraded with new fixtures and vanities. Cabin 1 received a remodel of the bathroom. The lodge lobby air conditioning units were repaired several times and room air units were repaired and several replaced. A strong storm that was later identified as a tornado struck near the lodge in July 2014 and created a power outage during the peak season. The lodge and entire park were without power for several days and cleanup of downed trees took many hours. The road from the park entrance to the park office was resurfaced.

Tygart was the recipient of a donation that allowed the construction of a new playground near the campground area. Additional gifts will allow the completion of a remodel of the Nature Center, nature trail, amphitheater and native flower garden. Construction will be completed in the fall of 2015.

Tygart Lake hit a record high March 16, 2015, with height of 47.8-foot level. Extensive flooding occurred that left a debris field of hundreds of tons of trash and debris to be removed. As progress was being made on the cleanup, the lake flooded again in April, bringing even more trash to the park. Work is still ongoing to repair the damage to the beach and remove the remainder of the expansive debris field.





## Valley Falls State Park

Renovations to the superintendent residence included new flooring, painting, a new dishwasher and some new electrical outlets were installed. The maintenance shop and all other park buildings were cleaned and organized. The park hosted the annual Valley Falls Car Show and Valley Falls Mountain Bike Race. A new light fixture was installed in the park restroom. The park continued to host many weddings throughout the year. As a fundraising venture, the park foundation began selling concessions out of their trailer on weekends.

## Watoga State Park (includes Calvin Price State Forest)

Improvements in the cabin areas included varnished floors in 13 cabins, continuing to replace water shut-off valves under the standard cabins, installing fire rings in eight cabins and initiating a cabin re-staining project that will eventually include all cabins. Two major gabion basket systems were installed, one each in the Bucks Run and the Pine Run Cabin areas, to alleviate a creek erosion problem and widen the parking area for Cabin 22. A major effort was made in Riverside Campground to remove dead and/or hazardous trees. This spring project lasted the better part of a month and had the added benefit of providing the park with much-needed firewood. The biggest project of the year was the ongoing renovation of the old restaurant into the new park offices. The old kitchen and gift shop areas were converted into offices and storage spaces, with walls constructed, dry-walled and wainscoted, electric, computer and phone outlets installed, chair rails were installed and painting was completed. Drop ceilings and a new hardwood floor were installed, and doors were installed and varnished. A group of locals and other interested parties decided to start Watoga State Park's first park foundation. Several meetings were held and the necessary paperwork was completed and filed. Even though the organization was in its early stages, a "trail committee" was formed and began working diligently on several of the park's trails.

On Calvin Price, timber cutting continued on the Bond Place and the Yellow Gate timber sales. The Yellow Gate Road was opened up with a major daylighting cut, and the Bond Place Sale Road was lengthened to almost 2 miles. This road will eventually end on the old county road on top of Spice Ridge. The Division of Forestry began working up a new timber sale that will take place on Pond Ridge above the Laurel Run Section of Watoga State Park.

## Watters Smith Memorial State Park.

Trail work continued with several of the parks trails being repaired, contoured for erosion and brush cut back. The Rachel Hershey Trail and service road received several repairs involving installation of a culvert and repair of large holes. A bulletin board with trail map was installed on the Burr Smith Trail. Historical and nature interpretive signage was placed at various locations across the park with more in development. A septic system was installed with the help of PEM staff. The pool bathhouse facility was demolished in-house and much of the materials were reused. The park once again hosted another JAKES Day event as well as the Watters Smith to West Milford 5K and Harrison County Cross Country Championship Race.



## **PLANNING/ENGINEERING/MAINTENANCE SECTION**

This section is responsible for planning and completing major projects throughout the park system. The following is a list of those completed and on-going projects.

### **Substantially Complete Projects as of June 30, 2015**

- Babcock Mill Wood Shingle Roof Replacement
- Beech Fork Trail and Parking Improvements
- Berkeley Springs Old Roman Bath HVAC
- Blackwater Lodge Second Floor Plumbing and Electrical Repairs
- Blackwater Falls Emergency Replacement of Three Utility Poles
- Blackwater Falls Sled Run Snow Making System
- Blackwater Falls Sled Run Snow Making Well
- Blackwater Falls Water Well Drilling Services
- Blennerhassett Island Museum HVAC
- Blennerhassett Island Mansion Cooling
- Cacapon Well Pump Replacement
- Cacapon Cabins Water Pump ROTO-Phase Replacement
- Cacapon Old Inn Restoration (on-going)
- Canaan Resort Outdoor Pool Filtration System
- Cathedral Storm Debris Cleanup
- Chief Logan Lodge HVAC
- Holly River Emergency Campground Power Repair
- Holly River Power Pole Removal
- Holly River Primary Electric Service Replacement
- North Bend Rail Trail Gas Line ROW Remediation
- Stonewall Pathways, Decorative Crosswalks
- Tygart Kitchen HVAC and Roof Repairs

### **Design Projects completed as of June 30, 2015**

- Blennerhassett Island Boat Dock
- Blennerhassett Wheelchair Lift
- Cacapon North Canopy Lodge Repairs
- Carnifex Sign Shop Addition
- Chief Logan State Park Pre-cast Restroom
- Hawks Nest Emergency Tramway Electrical Drive Replacement
- Hawks Nest CCC Pavilion
- Pipestem Lodge Fire Alarm
- Pipestem Lodge Structural Repairs
- Watters Smith WWTP Replacement
- Tomlinson Run Fishing Access

### **Construction Projects in progress by June 30, 2015**

- Bluestone – Pitts Road Addition
- Pipestem HVAC Piping Replacement
- Pipestem Sliding Doors and Windows
- Prickett's Fort Bird Watching Platform
- Seneca State Forest Maintenance Building Foundation Repair

### **Design Projects in progress by June 30, 2015**

- Blackwater Falls Sled Run Improvements Phase III
- Coopers Rock Water and Wastewater Systems Improvements
- Lodge Beautification Project
- North Bend Rail Trail Emergency Repairs
- Pipestem Tramway Emergency Wire Rope Repairs



# Wildlife Resources Section



## Wildlife Resources Section

Paul R. Johansen, *Chief*

The Wildlife Resources Section (WRS) is responsible for the management of the state's wildlife resources for the use and enjoyment of its citizens. The primary objective of the section is to maintain and perpetuate fish and wildlife at levels compatible with the available habitat, while providing maximum opportunities for recreation, research and education.

## ADMINISTRATION

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### Outreach

WRS staff devoted considerable time assisting conservation and civic clubs, schools and communities with various wildlife related inquiries and informational needs. These activities included working with the following organizations and events: Boy Scouts, 4-H clubs, Envirothon events, sportsmen's clubs, hunting and trapping-based clubs, nature tours, outdoor and hunting shows, fairs, training schools and the National Hunting and Fishing Days Celebration. Cooperation was given to universities and colleges by serving as guest lecturers. The agency worked in close cooperation with the West Virginia University (WVU) Extension office in conducting "Venison 101 Workshops" around the state. More than 150 classes and lectures on conservation were presented and more than 100 sportsmen's groups meetings were attended. Numerous interviews were given to the TV, radio and print media.

In 2014-2015, 153 hunters had their deer antlers scored at one of the six West Virginia Division of Natural Resources (DNR) District Offices, wildlife field offices or during the West Virginia Hunting and Fishing Show in Charleston. There are 18 WRS wildlife biologists and wildlife managers distributed throughout the state who are certified by the Boone and Crockett and Pope and Young Clubs as official scorers.

Sectional meetings were conducted at 12 sites around the state in March to present proposed regulation changes to hunters, anglers and others interested in the state's wildlife management programs. These meetings also provide the public an opportunity to make recommendations and ask questions relating to our regulation proposals and our agency's programs.

Special youth hunting opportunities were conducted for waterfowl, squirrel, turkey and white-tailed deer. The special youth hunts provide an excellent opportunity to introduce young people to the outdoors and the hunting tradition.

The West Virginia State Wildlife Center continues to excel as an outdoor educational facility. More than 35,832 visitors and 24 group tours visited the area's facilities and enjoyed viewing West Virginia wildlife.

Staff conducted or assisted in 12 fishing education events involving more than 1,500 participants. These events included National Fishing and Boating Week, Hooked on Fishing Not on Drugs and Becoming an Outdoors-Woman. Additionally, the agency participated in the Cabela's "Wanna Go Fishing for Millions" event by tagging fish in Burnsville, R.D. Bailey, and Tygart lakes as part of contest designed to promote fishing in West Virginia.

Information and Education staff gave 14 presentations to approximately 1,300 people. Staff also worked at Junior Conservation Camp and wrote and administered the Wildlife Exam for the West Virginia Envirothon. Personnel edited, proofed and updated the hunting and fishing regulations in printed format and on the website. Staff reviewed and coordinated Web updates for the WRS. They helped with writing, editing, and proofing the West Virginia Wildlife Calendar and legislative rules. Staff edited, approved and coordinated with Department of Commerce Marketing and Communications for the publication of various brochures.

Lottery proceeds were used to place advertisements in both electronic media (TV and radio) and print media (magazines and newspapers). A big push was made this year to promote hunting and fishing in the state. Ads ran in regional Game and Fish Publications, WVU, Marshall and Ohio State University yearbooks along with the programs of several professional sports teams in Ohio, Maryland and Pennsylvania. Ads also promoted National Hunting and Fishing Day Celebration and the State Wildlife Center.

The WRS sponsored and provided ideas, technical assistance and interviews for West Virginia Wildlife, a weekly, 90-second TV segment shown on six newscasts on two stations in the Charleston-Huntington-Beckley market. The shows can also be viewed on the WCHS-TV website. The West Virginia Outdoors and DNR Report radio programs were broadcast over 17 MetroNews affiliated stations located throughout the state.

Project WILD provides training for formal and nonformal educators across the state. In the past year, 70 educators attended two Project WILD workshops. Growing Up WILD is a program of activities for preschool age educators. Seven workshops were attended by 131 educators.

The Becoming an Outdoors-Woman (BOW) program is continuing to introduce women to outdoor activities. The fall workshop was well attended with more than 70 participants. The women participated on hands-on hunting, fishing, backpacking, canoeing and other outdoor-related skills classes.

### **West Virginia Wildlife Endowment Fund**

The total market value of the fund at the close of FY 2015 was \$55,129,442.23. During Calendar Year 2014, there were 370 Adult Lifetime Licenses sold, 1,337 Infant Lifetime Licenses sold, and 5,270 Senior Lifetime Licenses sold for a total dollar amount of \$801,490.

### **Hunting and Fishing License Unit**

The Hunting and Fishing License Unit within WRS is responsible for administering all aspects of the hunting and fishing license operations. In 2014, there were 913,578 license privileges sold resulting in license revenue of \$15,455,469.

The goWILD! online license sales and the agent electronic point of sale system continued to grow in popularity with the two methods for purchasing a license accounting for approximately 82.5 percent of license revenues for the 2014 license year.





**Hunting and Fishing License Sales By Residency and Class—Calendar Year 2014**  
**Total License Sales**

<b>RESIDENT</b>				
<b>Class</b>	<b>Description</b>	<b>Price</b>	<b>Number</b>	<b>Amount</b>
A	Hunting and Trapping	\$19.00	25,589	\$486,191
AH	Apprentice Hunt & Trapp	\$19.00	639	\$12,141
AHJ	Apprentice Junior Hunt & Trapp	\$16.00	565	\$6,215
B	Fishing	19.00	90,446	\$1,718,474
N	Antlerless Deer Hunting	10.00	78,282	\$782,820
BG	Big Game	10.00	3,808	\$38,080
RG	Additional Deer - Firearms	21.00	23,273	\$488,733
RB	Additional Deer - Archery	21.00	18,001	\$378,021
RM	Additional Deer - Muzzleloader	16.00	1,504	\$24,064
X*	Sportsman Hunting/Trapping/Fishing	30.00	96,201	\$2,886,030
XJ**	Junior Sportsman Hunting/Trapping/ Fishing	11.00	7,982	\$87,802
A-1	Small Arms Hunting	8.00	8,040	\$64,319
DS	Bear Damage Stamp	10.00	24,934	\$249,340
O	Trout Fishing	10.00	100,587	\$1,005,870
CS***	Conservation Stamp	5.00	217,645	\$1,088,225
<b>Resident Subtotal</b>			<b>697,496</b>	<b>\$9,316,325</b>

\*The listed price of X (\$30) does not include the price of the CS (\$5). Total price of X is \$35.

\*\*The listed price of XJ & AHJ (\$11) does not include the price of the CS (\$5). Total price of XJ & AHJ is \$16.

\*\*\*CS includes the CS stamps sold on X and XJ licenses.



<b>NON-RESIDENT</b>				
<b>Class</b>	<b>Description</b>	<b>Price</b>	<b>Number</b>	<b>Amount</b>
I	National Forest Hunting/Trapping/ Fishing	\$2.00	14,071	\$28,142
E	Non-resident Hunting/Trapping	119.00	26,133	\$3,109,827
EE	Non-resident Bear Hunting	162.00	1,426	\$231,012
AAH	Non-resident Apprentice Hunt & Trapping	\$119.00	73	\$8,687
AAHJ	Non-resident Apprentice Junior Hunt & Trapping	\$16.00	436	\$6,976
F	Non-resident Fishing	37.00	12,107	\$447,959
H	Non-resident Small Game Hunting - 6 day	27.00	828	\$22,356
LL	Non-resident Fishing - 1 day	3.00	47,830	\$143,490
NN	Non-resident Antlerless Deer	27.00	16,867	\$455,409
RRG	Non-resident Additional Deer - Firearms	43.00	4,475	\$192,425
RRB	Non-resident Additional Deer - Archery	37.00	1,960	\$72,520
RRM	Non-resident Additional Deer - Muzzleloader	37.00	197	\$7,289
UU	Non-resident Archery Deer	32.00	6,045	\$193,440
VV	Non-resident Muzzleloader Deer	32.00	1,707	\$54,624
WW	Non-resident Turkey	32.00	3,458	\$110,656
XXJ	Non-resident Junior Sportsman	16.00	2,130	\$34,080
A-1	Small Arms Hunting	8.00	1,201	\$9,609
DS****	Bear Damage Stamp	10.00	1,496	\$14,960
OO	Trout Fishing	16.00	13,811	\$220,976
J*****	Small Game Shooting Preserve Hunting - 6 day	10.00	1,032	\$10,320
CS/LE	Non-resident Conservation / Law Enforcement	13.00	58,799	\$764,387
<b>Non-resident Subtotal</b>			<b>216,082</b>	<b>\$6,139,144</b>

\*\*\*\* Non-resident DS is equal to EE purchases.

\*\*\*\*\* Available through goWILD! Online only

<b>Grand Total Resident + Non-resident Sales</b>	<b>913,578</b>	<b>\$15,455,469</b>
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**Hunting and Fishing License Sales By Class — Calendar Year 2014**  
**Lifetime Agent License Sales**

<b>ADULT</b>				
Class	Description	Price	Number	Amount
<b>Adult</b>				
A-L	Hunting and Trapping	\$782.00	3	\$2,346.00
AB-L	Hunting, Trapping, and Fishing	\$805.00	241	\$194,005.00
A-1-L	Small Arms Hunting	\$75.00	22	\$1,650.00
B-L	Fishing	\$552.00	22	\$12,144.00
O-L	Trout	\$230.00	82	\$18,860.00
<b>Adult Subtotal</b>			<b>370</b>	<b>\$229,005.00</b>

<b>INFANT</b>				
Class	Description	Price	Number	Amount
<b>Infant</b>				
A-L-I	Hunting and Trapping	\$391.00	1	\$391.00
AB-L-I	Hunting, Trapping, and Fishing	\$402.50	988	\$397,670.00
B-L-I	Fishing	\$276.00	14	\$3,864.00
O-L-I	Trout	\$115.00	334	\$38,410.00
<b>Infant Subtotal</b>			<b>1,337</b>	<b>\$440,335.00</b>

<b>SENIOR</b>				
Class	Description	Price	Number	Amount
<b>Senior</b>				
A-1-L	Small Arms Hunting	\$75.00	8	\$600.00
XS	Hunting and Trapping	\$25.00	5,262	\$131,550.00
<b>Senior Subtotal</b>			<b>5,270</b>	<b>\$132,150.00</b>

<b>Grand Total Lifetime Sales</b>			<b>6,977</b>	<b>\$801,490.00</b>
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## Capital Improvements

The WRS continued its successful capital improvements program to enhance opportunities for hunters, anglers and other wildlife recreationists. Funds for capital improvements are primarily derived from 10 percent of the hunting and fishing license revenues and from the purchase of Conservation Stamps by licensed hunters and anglers. This program is one of the most visible efforts of the agency, providing facilities such as wildlife management areas, shooting ranges, fishing and boating access sites, physically challenged accessible hunting and fishing facilities, and fish hatchery and dam improvements.

The year's major projects were:

1. Acquired 1 acre of land in for fishing and boating access to the Kanawha River in Winfield, Putnam County.
2. Purchased additions to two wildlife management areas totaling 257 acres.
3. Acquired 3,836 acres dedicated as Cheat Canyon Wildlife Management Area, Preston County.
4. Paved the approach road to the Barger Spring Public Access Site Greenbrier County.
5. Completed construction of upgraded public boating access facilities on the Elk River near the Sutton Dam tailwaters, Braxton County.
6. Completed construction of carry down boating access to Mill Creek near Rollins Lake, Jackson County.
7. Completed cleaning of the Reeds Creek State Fish Hatchery settling pond.

## West Virginia's Archery in the Schools Program

The DNR began the Archery in the Schools (AIS) pilot program in the fall of 2004 with 19 schools and in 10 years of operation has exceeded all expectations. This interest has allowed DNR to host trainings in every region of the state, reaching more than 800 physical education teachers and volunteers. The WRS has received an increasing demand to certify additional instructors and we have developed a one-day training specifically designed for college physical education majors. Because of the program's success, the DNR has hosted 10 annual state archery tournaments. This year, the Annual Archery in the Schools State Qualifying Virtual Tournament was held with 949 students from 54 schools participating. Of these students, 487 students from 46 schools participated in the state tournament. West Virginia had schools participate in the National Archery in the Schools Tournament in Louisville, Kentucky, and in the World Tournament held in Nashville, Tennessee.

The AIS Program has become the DNR's largest and fastest growing educational programs — reaching an estimated 85,000 students in the past 10 years. The DNR, along with the Department of Education and wildlife organizations, has been able to introduce student's grades 4-12 a life skill of archery. West Virginia is one of 48 states participating in this national program, with similar success being experienced by state wildlife agencies throughout the country. The DNR received national attention when the West Virginia School for the Deaf and Blind (WVSD) became the first school in the nation for the hearing and sight impaired to participate in this program.

## Hunters Helping the Hungry

The Hunters Helping the Hungry (HHH) Program is a cooperative effort involving the DNR, the Mountaineer and Huntington Area Food Banks, and a network of more than 550 local food pantries, shelters, churches and children's homes. Since its inception in 1992, the HHH Program has provided more than 1.2 million family-style meals to the state's hungry. In 2014, generous hunters donated 503 deer (17,725 pounds of nutritious meat providing more than 23,633 family-style meals). Deer processing and transport costs for the HHH Program in 2014 was \$37,023.82, which was offset largely in part with donations from the West Virginia Department of Health and Human Resources, Share the Harvest Sunday fundraiser, Governor's One Shot Deer Hunt, wildlife organizations and the generosity of private individuals. Federal and state laws prohibit the use of license revenue to fund this program and the DNR must rely upon the generosity of others through donations.





## **National Hunting and Fishing Days — Stonewall Resort State Park**

West Virginia's Celebration of National Hunting and Fishing Days is like no other event held in West Virginia, with hands-on learning opportunities for youngsters and families in the area of wildlife and outdoor recreation. The objective of the event is to educate the non-hunting/fishing public on the benefits of these recreational activities and how they support the DNR's efforts in wildlife conservation. The DNR teams with the West Virginia Wildlife Federation to promote this important event. Nearly 7,000 wildlife enthusiasts were in attendance to try their hand at everything from archery, shooting, fly-fishing and a kid's fishing derby, to list only a few. In addition, attendees also have the opportunities to sit in on several wildlife demonstrations or visit one of the hundred-plus vendors on hand.

## **Outdoor Youth Challenge**

The Outdoor Youth Challenge (OYC) is one of the most important events held annually at West Virginia's Celebration of National Hunting and Fishing Days. The OYC is both a youth expo and competition. Young people are exposed to a multitude of activities and displays with real hands-on learning and instructional opportunities that encourage them to gain important knowledge and experience about wildlife, hunting, fishing, firearms safety and outdoor recreation. Young folks can choose only to participate or they can compete. For some youngsters, this is the only opportunity they have to be exposed to these fun and exciting outdoor activities.

## **GAME MANAGEMENT**

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The Game Management Unit conducts habitat management and law enforcement activities on 90 Wildlife Management Areas (WMAs) and eight state forests totaling 439,428 acres. Acquisition of public lands and unique habitats (e.g., wetlands) continues to be a priority, especially in targeted regions of the state. Additions were made to two WMAs totaling 257 acres, and one new WMA, Cheat Canyon WMA (3,836 acres) was established through purchase and lease agreements in FY14-15.

In addition, an extensive wildlife management program is conducted on nearly 1.1 million acres of national forest land (composed of 14 WMA units) located in West Virginia through a cooperative agreement with the U.S. Forest Service. State wildlife biologists and managers devote a significant portion of their time reviewing national forest scoping notices, timber sales and providing technical input in the development of national forest plans. Management issues are closely reviewed to ensure that our fish and wildlife resources receive the maximum possible benefit. Joint meetings with the U.S. Forest Service and the U.S. Army Corps of Engineers were held to coordinate management activities among the various agencies. Numerous land reviews and evaluations were conducted by the WRS during the reporting period.

Management on the 90 WMAs and national forest lands is directed toward improving wildlife habitat for an array of species. Forest management activities were conducted on 548 acres with additional timber sales in the planning and marking stages. Mitigation for oil and gas exploration on WMAs consumed a large amount of personnel time.

Management activities on state and national forest lands included planting 722 trees and shrubs for food and cover and pruning, releasing and/or grafting more than 420 individual trees and shrubs.

More than 2,648 acres of wildlife clearings were mowed and 27 acres of new clearings were established. Lime and/or fertilizer were applied to 498 acres, and 403 acres were seeded to herbaceous vegetation including dove fields. Prescribed burning was used to retard vegetation succession and improve the diversity and abundance of desirable plants on 95 acres. Herbicide was used on 242 acres to control

undesirable/invasive vegetation. Sharecropping agreements with local farmers were executed on 1,483 acres to maintain open land habitat. Seventy-four waterholes were maintained to provide a year-round water supply for wildlife.

Water levels on 207 acres of wetlands were manipulated to encourage waterfowl utilization. Three hundred seventy-eight waterfowl nest structures were maintained. Forty-seven nest structures were maintained for other wildlife species.

More than 790 miles of roads and trails, and 16 bridges were maintained. Road closures were installed and/or maintained at 521 sites to prevent disturbance to wildlife and to protect wildlife habitat.

Numerous information and regulation signs were erected or maintained. Three hundred ninety campsites, 28 boat ramps, 28 shooting ranges, 25 physically-challenged hunter access roads, seven angler access sites and 174 parking areas were maintained for public use.

The highly successful controlled waterfowl hunting program at the McClintic and Greenbottom WMAs continued to provide quality waterfowl hunting for West Virginia hunters. Approximately 41 waterfowl ponds and 22 shooting stations are maintained on the McClintic WMA, including two shooting stations for the physically challenged.

### **Wildlife Damage and Nuisance Activities**

Thirty-eight nuisance bears were destroyed, 10 were relocated and one was trapped and released on site. Hundreds of other bear complaints were resolved with harassment measures and/or removal of edible attractions.

Literally thousands of additional calls regarding sick, injured or nuisance wildlife are handled annually. Calls about nuisance wildlife are often resolved by providing technical advice and recommendations but many require capture and relocation or euthanasia of the offending animal.

The Wildlife Damage Control (WDC) agent program allows for businesses to be licensed with the DNR to take and dispose of wildlife found to be creating a nuisance in and around homes, businesses and other places where the presence of wildlife may be a nuisance. Thirty-three businesses were licensed by DNR during 2015 as WDC agents.

### **Environmental Reviews**

Wildlife biologists reviewed numerous projects that potentially impact wildlife, populations and habitat. Primary concerns are road construction, stream alteration and water withdrawals, hydropower projects, power line rights of way, gas line construction, oil/gas well sites, surface mines and other construction projects. In numerous cases, recommendations have been made to alter project designs, thus reducing environmental and negative impacts to fish and wildlife habitat and populations, as well as unique plant communities.

### **Wildlife Population Surveys and Research**

Waterfowl surveys (7) and census routes for woodcock (24) were conducted in cooperation with the U.S. Fish and Wildlife Service. Surveys were also conducted for bald eagles (7), song birds and ring-necked pheasant (Hillcrest WMA). Canada geese and mourning doves were banded in cooperation with the U.S. Fish and Wildlife Service, Atlantic Flyway States and the Eastern Dove Management States to monitor populations and for the purpose of establishing regulations. Three hundred seventy-three mourning doves (373) and 472 Canada geese were banded in 2014-2015 as a part of this effort.





Harvest and biological data were compiled and analyzed for hunter-harvested big game species (e.g., deer, turkey, bear and wild boar) as well as hunter and trapper-harvested furbearers (e.g., beaver, fisher, bobcat and otter).

### **Technical Assistance**

Interest in managing private lands for wildlife continues to increase, and biologists are frequently contacted for technical assistance. Assistance ranges from general advice over the telephone to providing specific management recommendations to actually completing detailed site specific management plans. Approximately 589 staff days were spent providing technical assistance to private individuals and landowners in 2014-2015.

### **Regional, National and International Coordination**

Many of the challenges and issues facing the WRS's Game Management Unit are shared by other states and agencies. A number of regional, national and international organizations exist to promote information exchange and multi-jurisdictional coordination. The WRS is an active member/participant in many of these organizations and their various committees. Notable organizations include: Association of Fish and Wildlife Agencies, Southeastern Association of Fish and Wildlife Agencies, Northeast Association of Fish and Wildlife Agencies, The Wildlife Society, Atlantic Flyway Council and Technical Sections, Southeast Deer Study Group, Southeastern Cooperative Wildlife Disease Study, Eastern Elk Management Workshop, Eastern Management Unit Dove Technical Committee and Appalachian Mountains Joint Venture.

### **White-tailed Deer**

West Virginia continues to be one of the favorite deer hunting grounds in the eastern United States. In 2014, deer hunters harvested 104,707 deer in the combined deer seasons. This is a 31 percent decrease from the 2013 harvest and 23 percent less than the previous five-year harvest average of 136,168. The combined deer season harvest for 2014 is the 30th largest total deer harvest on record for West Virginia. The 2014 total deer harvest represents one deer killed for every 140 acres of deer habitat in the state, and a 59 percent harvest decrease from the record harvest of 255,356 deer in 2002. From 1945 through 2014, 5,996,032 deer have been recorded as harvested in West Virginia. Fifty-eight percent (3,472,423) of the total recorded deer harvest of the past 69 years has occurred in the past 20 years.

A special urban archery deer hunting season is available to incorporated cities and homeowner associations, which may open three weeks before the opening of the statewide deer archery season and its close Dec. 31. During this special season, seven deer may be taken which do not count toward the regular archery deer season bag limit. In 2014, 14 cities (Alderson, Barboursville, Bethlehem, Bridgeport, Charleston, Harpers Ferry, Harrisville, Morgantown, North Hills, Parkersburg, Ronceverte, South Charleston, Weirton and Wheeling) reported harvesting 671 deer. In addition, 215 deer were harvested during urban deer archery hunts conducted by 10 homeowner associations.

Efforts to monitor and control the spread of chronic wasting disease (CWD) in free-ranging deer in Hampshire and Hardy counties by DNR, landowners and hunters are ongoing. In the 2014 deer seasons, samples from 472 hunter-harvested deer brought to game checking stations in Hampshire County, two stations in northern Hardy County and one station in northern Morgan County were tested for CWD. Nineteen samples were found to have the abnormal protein associated with CWD. CWD has now been detected in 179 deer in Hampshire County and four deer in Hardy County. Lowering encounter rates between infected and non-infected animals by prohibiting artificial supplemental feeding and baiting are generally accepted management practices for slowing the spread of an infectious disease among wildlife and initiating these prohibitions on a statewide or regional basis for deer is a major tool used by other states combating CWD. The containment area for baiting and carcass transport has been expanded in 2015.

Deer herd health checks were conducted in Hampshire, Hardy and Mineral counties during August and September 2014. These collections provide another tool for monitoring the health of the deer population and help the agency to evaluate deer densities as they relate to the habitat's carrying capacity.

Deer distance sampling routes were conducted in 34 counties (1,209 miles) during August and September 2014. The primary purpose of the surveys is to estimate deer densities and population trends across the landscape.

A Ph.D. student at West Virginia University has begun a DNA-based study titled "Relationship of White-tailed Deer Genetics in West Virginia to the Spread of Chronic Wasting Disease." The research is being funded by the DNR, WRS.

A bowhunter survey has been conducted annually since 1995. This cooperative venture with the West Virginia Bowhunters Association is an excellent means of monitoring populations of game animals and furbearers as well as providing a method for bowhunters to report their observations. The wild turkey fall harvest has been measured accurately by the survey.

## **Elk**

An elk management plan has been written and the agency is currently exploring seed sources for a reintroduction stocking. An elk population monitoring plan is being conducted using salt blocks and trail cameras. Monitoring stations in the elk management area were randomly selected from best elk habitat available. Best available habitat was determined through GIS analysis based in part on Kentucky elk habitat use. Acquisitions through purchase or lease agreements will target these high priority areas within the elk management area.

Two open house public meetings to gauge interest for trans-locating elk to West Virginia were held in Logan and Mingo counties during the fall of 2014. In addition, a statewide voluntary online survey was conducted to reach out to citizens throughout the state who were unable to attend the public meetings. Results indicated overwhelming public support for restoring elk to the southern coal fields region of West Virginia. One thousand one hundred thirty responses (1,130) from residents of 52 of 55 counties were 93 percent in favor of proceeding with active elk restoration in West Virginia.

## **Black Bear**

West Virginia hunters harvested 2,425 black bears during the combined 2014 archery and firearms seasons. This is the fifth time the kill has topped 2,000 in the past five years. The harvest of 2014 was 10 percent lower than the 2013 harvest of 2,692 bears and is the third highest harvest on record.

One-hundred seventy (170) bears were killed on highways, dead as a result of illegal or marauder activities, or succumbed from other non-hunting causes (electrocution, accidental poisoning, etc.). This is down 3 percent from the 175 non-hunting mortalities recorded in 2013. The combined seasonal and non-seasonal deaths (2,595), is the third largest recorded in West Virginia.

## **Wild Turkey**

For decades, West Virginia operated a mandatory game checking system where hunters were required to report their big game harvest, including turkeys. Checking stations were located at stores, service stations and other readily recognized places of business. Check stations were not paid for their services, nor was money collected by them to check in an animal. WRS personnel visit the stations following hunting season to collect the harvest tags which are then coded by district personnel and eventually hand keyed into a database. Harvest data are compiled by county, date, district, management area, unit area and ecological region. The fall of 2014 was the last hunting season where this system was operational. By the spring gobbler season of 2015, a totally electronic system was in place for the





sportsmen to use. This new automated system allows hunters to check their turkeys in by telephone or Internet. For those not possessing one of those devices, 180 license agents use their telephone or Internet connection to provide this service to the public. Hunters harvested 9,038 gobblers this spring, which was slightly lower than the number checked last year. However, because we do not know yet if the check-in rate changed between systems, drawing annual comparisons is problematic.

The survey of wild turkey broods is an important aid in forecasting the statewide harvests and changes in the wild turkey population. Brood reports statewide in 2014 were 30 percent higher than the previous year.

The spring gobbler survey was conducted jointly by the WRS and the West Virginia Chapter of the Wild Turkey Federation. The survey serves as a means for hunters to report their observations and opinions about wild turkey management. It also allows biologists to track species throughout time and serves as an invaluable tool to help monitor wildlife populations.

### **Wild Boar**

Boar were introduced in 1971 to supplement big game populations and did well enough to accommodate a hunting season in 1979. Harvests have ranged from three that year to 158 in 1995. The decline in the population since the late 1990s led to the removal of the December season in 2003. The October firearms season is designed to reduce the harvest and allow numbers to improve and move into unoccupied habitats. Traditionally, hunters have been less successful during October when weather conditions are warm and dry and leaf fall makes boar sign more difficult to find.

Hunters killed 51 boars during the 2014 season. This closely relates to the harvest of 49 boars taken last season. Hard mast was plentiful in the fall of 2014 in the boar counties. With great mast conditions, boars would be moving less to find food and therefore would be tough to hunt. West Virginia boar hunters knowing their quarry were very successful given the tough hunting conditions this year. Firearms hunters took 21 boars (seven in Logan County and 14 in Boone County) and archers killed 30 (21 in Logan County, eight in Boone County, and one in Wyoming County). Raleigh County had no reported kills. Wyoming County's first harvest in many years was killed very close to the Boone County line.

### **Ruffed Grouse**

Twenty-eight cooperators (double last year's total) from all four ecological regions submitted envelopes for the 2014-15 grouse season. They reported on 271 hunting trips, which was up 24 percent from the 2013-14 season. On these hunting trips which include other party members, 330 hunters spent 1,181 hours hunting, shot at 391 grouse and took 134 of them home. Birds identified as crippled were 2.8 percent of those shot at. Examination of this table over the course of the past 20 years reveals that, while the number of cooperators and their hunting buddies has declined significantly, the average amount of time spent per trip and the number of birds they get a chance to shoot at has not. In 1993, the number of hours spent hunting by party member was 2.2; over the past three years it was 2.4. On their trips, hunters in 1993 shot at 0.38 grouse per hour; in 2014 they shot at 0.32 per hour. Flushing rates have remained relatively poor over the past 20 years with hunters flushing 1.6 and 1.3 birds per hour in 1993 and 2014, respectively. The 20-year average flush rate is 1.2 and cooperators this year exceeded that by 8 percent. While that is virtually unrecognizable from a practical sense, at least it was an increase.

## Bobcat

A bobcat research study was initiated during 2014 with the primary objective of identifying population age structure, and survival and reproductive rates by age class, as well as population size and density of bobcats in West Virginia by ecoregion. The study will also result in an updated bobcat population model for the state. As part of this study, 300 bobcat carcasses were collected from hunters and trappers during the 2014-2015 season for analysis, and a bobcat sampling technique using hair snares was implemented across the state by DNR personnel during the spring of 2015.

## Annual Mast Survey

Annually during August, cooperating personnel in the DNR rate the abundance of mast produced by selected tree and shrub species. Mast indices are then formulated for each species on a statewide and ecological region basis. This survey has been conducted annually since 1970 and is important information often requested by hunters. Mast abundance is also an important tool to forecast the annual big game harvests.

Compared to the 2013 survey, the mast index for all species combined was up 4 percent. Last year, beech, hickory and walnut were abundant while oaks were scarce. In 2014, indices for oaks were up and indices for beech, walnut and hickories are down. Compared to last year, indices for all oak species increased more than 100 percent, indicating a substantial increase in oak production. Scarlet oak increased 262 percent compared to 2013. White, chestnut, black, red and scarlet oaks should be commonly found across the landscape. Statewide, beech did poorly compared to the bumper crop in 2013. Walnut and hickory followed a similar trend as beech, with a reduced production of nuts. Walnut and hickory decreased 32 and 55 percent, respectively.

For soft mast, black cherry was clearly abundant across the state in 2014 but was only 3 percent above the index for 2013. Dogwood and blackberry were noticeably higher with indices 23 and 12 percent, respectively above 2013 values. Sassafras increased 19 percent, similar to dogwood and blackberry. Apple and crabapple were lower than their 2013 values. Apple declined 21 percent and crabapple declined 17 percent compared to last year.

## WARMWATER FISH MANAGEMENT

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The Warmwater Fish Management Unit is responsible for providing fishing opportunities to meet increasing recreational demand and for protecting and managing approximately 98,000 acres of warmwater streams and more than 22,000 acres of public impoundments.

To meet this challenge, the warmwater program is divided into five areas:

- 1) surveys and inventories of existing fishery resources, providing essential data to assess and develop management programs;
- 2) protection of fish habitat, placing intensive efforts toward review and comment on various state and federal permits for proposed activities that could possibly impact public fishing waters;
- 3) enhancement and development of fisheries, increasing production and use of fisheries through stream and lake improvements, and providing additional opportunities by stocking desirable fish species;
- 4) development of public access to fishery resources, ensuring adequate public access to existing streams and lakes, and acquisition and/or development of new lakes; and
- 5) outreach and information development, providing the public with material concerning fishing and fish management programs.





## **2014–2015 Warmwater Stocking**

### **Muskellunge**

More than 2,000 advanced fingerling muskies were stocked into Big Run, Burnsville, Curtisville, East Lynn, Flat Run, Huey Run, Mountwood, North Bend, Stonecoal, Stonewall Jackson, Teter Creek, Tygart Backwaters, Upper Mud and Woodrum lakes and the Buckhannon River. West Virginia's musky fishery is enhanced by this annual stocking program. Stocked musky represented 60 percent of reported catches and those qualifying for trophy citations in 2014.

### **Walleye**

More than 20,000 walleye fingerlings were stocked into the Ohio River. Charles Fork Lake, Dog Run Lake, and the Greenbrier River and the Ohio River received 6,500 advanced fingerling walleye. The walleye stocking program is designed to establish reproducing populations of this fine sport species in suitable waters throughout the state. Approximately 40 percent of all trophy catches since 1976 are from stocked waters. Research efforts continue to enhance native walleye populations, especially in the New and Ohio rivers.

### **Channel Catfish**

More than 138,000 channel catfish fingerlings reared at Palestine and Apple Grove hatcheries were stocked into 20 waters. More than 1,300 advanced fingerlings were stocked into Cedar Creek, Chief Logan, Mountwood, North Bend, Tomlinson Run and Watoga lakes. More than 3,400 catchable-size channel catfish were stocked into 21 waters in 2015 to provide enhanced family recreational fishing opportunities at community, state park and wildlife management area lakes. Fishable populations are established in the majority of these waters with excellent catfishing found in Anawalt, Barboursville, Berwind, Cacapon, Cedar Creek, Chief Logan, Conaway Run, Coopers Rock, Edwards Run, Fort Ashby, French Creek, Handley, Hurricane, Indian Rock, Krodel, Laurel, Little Beaver, Mason, Mountwood, North Bend, Pendleton, Pipestem, Tomlinson Run, Turkey Run and Wallback lakes.

### **Hybrid Striped Bass**

More than 275,000 hybrid striped bass fingerlings were released into the Monongahela and Ohio rivers and into Beech Fork, Bluestone and R.D. Bailey lakes. More than 5,800 hybrid striped bass advanced fingerlings were stocked into Curtisville, Dunkard Fork and Rollins lakes in 2015. Hybrids over 5 pounds are regularly being caught from stocked waters. The New and Kanawha rivers also are providing excellent opportunities to land trophy hybrids.

### **Striped Bass**

More than 43,000 striped bass fingerlings were stocked into Bluestone Lake and the Ohio River. Additionally, Mount Storm Lake received more than 2,700 advanced fingerling striped bass.

### **Black Bass**

More than 4,200 largemouth bass advanced fingerlings were stocked into the Ohio River.

### **Blue Catfish**

More than 99,000 blue catfish fingerlings were stocked into the Kanawha and Ohio rivers and R.D. Bailey Lake.

### **Paddlefish**

The Ohio River received 200 paddlefish advanced fingerlings as part of restoration efforts for this native species.



### **Hatchery Improvements**

Hatchery renovation plans are being developed with a contractor to address a number of priority operational issues, including water supply and treatment; water quality monitoring; and pond liner replacement. These improvements are needed to maintain fish production levels. These plans are the result of recommendations through a statewide hatchery study.



## **WARMWATER PROJECTS**

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### **Reservoir Management**

Fishery surveys were conducted on nine large reservoirs in the state. Surveys focused on black bass at Beech Fork, Bluestone, Burnsville, Cheat, East Lynn, Jennings Randolph, Mount Storm, Stonecoal and Stonewall Jackson lakes. Walleye population assessments were conducted at Summersville and Tygart lakes to better understand growth and size structure of this popular species. These inventories provide the basis for determining management needs and evaluating management measures. Angler surveys were conducted at Stonewall Jackson Lake to evaluate fishing regulations for black bass and muskellunge fisheries.

Annual operational changes by the U.S. Army Corps of Engineers and owners of other large reservoirs require coordination between the WRS and agencies responsible for these reservoir projects to minimize impacts to fish and wildlife and recreational opportunities during such operational changes. Information upon which to base these fish and wildlife considerations is available as a result of the section's reservoir monitoring program.

### **River, Stream and Lake Research and Surveys**

Stream and lake fisheries management activities continued in 2014. Black bass population assessments were conducted on 11 small impoundments. Other fisheries assessments included: muskellunge movement research on the Elk River and North Bend Lake; walleye movement and population assessments on the New River and at Charles Fork and Moncove lakes for broodstock source assessment; catfish research on the Ohio River and South Branch of the Potomac to assess age and growth; sauger and walleye surveys at five navigation dam tailwaters on the Ohio River.

### **Fish Health Surveys**

Fish health assessments are increasingly important components of fisheries management. Fish health surveys were conducted for black bass and sauger from the Belleville, Hannibal, R.C. Byrd and Greenup pools of the Ohio River. Largemouth bass virus was not detected in black bass collected from these pools in 2014. Health surveys conducted at two small impoundments and the Elk and Guyandotte rivers did not indicate the presence of deleterious pathogens in important recreational species. Surveys at four reservoirs in 2014 indicated the presence of largemouth bass virus at two reservoirs, Beech Fork and Stonecoal lakes.

### **Ohio River Coordination**

Fisheries management staff is coordinating fisheries research and management activities on the Ohio River. These efforts include fish population assessments through the interstate Ohio River Fish Management Team. Fisheries biologists are also participating in the Mississippi Interstate Cooperative Resource Association's aquatic nuisance species planning efforts to minimize impacts upon West Virginia's aquatic resources.

A cooperative effort continued with the Kentucky Department of Fish and Wildlife Resources through "fishing the leading edge" concept to assess and monitor the movement of Asian carp species in the Ohio River. This activity consists of intensive fish collections to determine how far these species have



moved and to remove substantial numbers of fish in an effort to slow or contain the upriver movement of these fish. Asian carp assessments also continued in partnership with the U.S. Fish and Wildlife Service in the collection of eDNA samples that assist in the monitoring of bighead and silver carp presence in the river. Analyses of eDNA in 2015 indicated the presence of genetic material for bighead carp from three of 100 samples in the Willow Island Pool of the Ohio River and from three of 100 samples in the Marmet Pool of the Kanawha River.

### **Habitat Enhancement**

Fisheries management staff continued habitat enhancement projects in 2014. A variety of structures were placed into nine reservoirs and two small impoundments. These projects included the long-running and successful fish attractor project using recycled Christmas trees at Beech Fork, Burnsville, Cheat, East Lynn, Mount Storm, Stonecoal, Summersville, Sutton and Tygart lakes. Many of these activities were in cooperation with local fishing organizations and the West Virginia Department of Environmental Protection's Rehabilitation Environmental Action Plan.

Catfish spawning boxes were installed at Beech Fork, East Lynn, Stonecoal, Teter Creek and Upper Mud lakes.

### **Fishing Tournament Coordination**

More than 660 fishing tournament days were permitted in 2014. These occurred on more than 30 lakes and rivers.

### **Trophy Fish Citation Program**

The Trophy Fish Citation program recognized anglers who caught 540 fish, representing 23 species that qualified as trophies in 2014. Of 13 waters (private lakes are counted as one water) yielding 10 or more fish citations, 70 percent were from streams and rivers, 10 percent from small public fishing lakes, 18 percent from private lakes and ponds and 3 percent from large public lakes. The trophy citation program began in 1976 and has recognized 59,006 anglers for their outstanding catches. The 2004 trophy citation program marked the first year of issuing length only citations in addition to the certified weight citation. This allows anglers to practice catch-and-release and still receive a trophy citation. In 2014, 289 length-only citations were issued.

The First Fish Certificate program was established in 2008 to recognize young anglers' first catches. The online certificate is a colorful, tangible way to record a youngster's first fish. The certificate can be completed with the angler's name, species of fish, date and place of catch. The certificate can then be printed at home at no cost. The First Fish Certificate can be found online at: [www.wvdnr.gov/Fishing/First\\_Fish.shtm](http://www.wvdnr.gov/Fishing/First_Fish.shtm)

## 2014–2015 Warmwater Stockings

Species and Hatchery/Source	Number	Size	Location
Blue Catfish	99,104	fg	R.D. Bailey Lake; Kanawha and Ohio rivers
Channel Catfish	3,472	ad	Anawalt, Barboursville, Berwind, Cacapon S.P., Cedar Creek S.P., Chief Logan S.P., Coonskin, Edwards Run, Fort Ashby, French Creek, Indian Rocks, Laurel, Little Beaver S.P., Mason, Mountwood, North Bend S.P., Pipestem S.P., Tomlinson Run S.P., Wallback, Watoga S.P. and Wirt County Farm lakes
Channel Catfish	138,112	fg	Airport, Cacapon 1 and 2, Camp Caesar, Dunkard Fork, Elkwater, Fitzpatrick, Horse Creek, Jennings Randolph CG, Krodel, Laurel, Little Beaver S.P., McClintic, Mountwood, O'Brien, Pettigrew, Ridenour, South Mill, Stonecoal and Upper Mud lakes; Ohio River
Channel Catfish	1,360	af	Cedar Creek S.P., Chief Logan S.P., Mountwood, North Bend S.P., Tomlinson Run S.P. and Watoga S.P. lakes
Hybrid Striped Bass	275,000	fg	Beech Fork, Bluestone and R. D. Bailey lakes; Monongahela and Ohio rivers
Hybrid Striped Bass	5,800	af	Curtisville, Dunkard Fork and Rollins lakes
Largemouth Bass	4,260	fg	Ohio River
Muskellunge	61,960	fy	Fishing and Mill creeks; Coal and New rivers
Muskellunge	2,020	af	Big Run, Burnsville, Curtisville, East Lynn, Flat Run, Huey Run, Mountwood, North Bend S.P., Stonecoal, Stonewall Jackson, Teter Creek, Tygart Backwaters, Upper Mud and Woodrum lakes; Buckhannon River
Paddlefish	200	af	Ohio River
Striped Bass	2,788	af	Mount Storm Lake
Striped Bass	43,075	fg	Bluestone Lake; Ohio River
Walleye	1,000,000	fy	Burnsville and Cheat lakes
Walleye	6,500	af	Charles Fork and Dog Run lakes; Greenbrier, Kanawha and Ohio rivers
Walleye	20,125	fg	Ohio River
		ad = adult af = advanced fingerling fg = fingerling fy = fry	



## 2014-15 Year Trout Stocking

Time Period & Hatchery	Rainbow Trout		Golden Trout		Brook Trout		Brown Trout		Total	
	Weight	Number	Weight	Number	Weight	Number	Weight	Number	Weight	Number
<b>Fall 2014</b>										
Spring Run	9,661	12,816							9,661	12,816
Petersburg	13,289	19,517							13,289	19,517
Bowden	9,391	7,600	254	144			2,510	3,006	13,130	11,345
Reeds Creek	4,950	3,683	440	375			110	27	5,500	4,085
*White Sulphur	3,000	1,209							3,000	1,200
<b>Sub-Total</b>	<b>40,291</b>	<b>44,816</b>	<b>694</b>	<b>519</b>			<b>2,620</b>	<b>3,033</b>	<b>44,580</b>	<b>48,963</b>
										<b>1.1</b>
<b>Spring 2015</b>										
Spring Run	142,495	174,847	18,364	22,419	28,986	35,567	5,977	9,179	195,822	242,012
Petersburg	27,036	29,605	1,197	1,066					28,233	30,671
Edray	29,870	66,386	1,739	2,733	3,268	5,186			34,877	74,805
Ridge	23,067	36,181	2,768	4,334	29,361	45,341			55,196	85,856
Tate Lohr	27,588	59,223	2,137	4,765					29,725	63,988
Reeds Creek	140,349	225,268	1,842	3,356	36,501	56,369	4,139	6,323	182,831	291,316
Bowden	169,228	243,346	3,295	4,681	23,024	36,523	8,150	16,223	203,697	300,773
*White Sulphur	2,985	1,222							2,985	1,222
<b>Sub-Total</b>	<b>562,618</b>	<b>836,578</b>	<b>31,342</b>	<b>43,354</b>	<b>121,140</b>	<b>178,986</b>	<b>18,266</b>	<b>31,725</b>	<b>733,366</b>	<b>1,090,643</b>
<b>TOTAL</b>	<b>471,300</b>	<b>776,740</b>	<b>32,036</b>	<b>43,873</b>	<b>122,115</b>	<b>179,581</b>	<b>20,866</b>	<b>34,758</b>	<b>777,946</b>	<b>1,139,606</b>

\*Federal Hatchery

## COLDWATER FISH MANAGEMENT

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In 2014-15 selected waters in West Virginia were stocked with 1,139,606 trout weighing 777,946 pounds. These trout were distributed to 31 impoundments, eight reservoir tailwaters, and numerous locations on 65 different stream and stream segments. Annual trout stocking distribution typically includes approximately 1,500 individual stocking runs annually.

Adequate hatchery water supply during fall 2014 permitted trout to be transferred between hatcheries. Dividing trout between hatcheries reduces fish crowding and resulted in good growth rates. As a result, the average size of trout stocked in 2015 was 11.5 inches and weighed 0.75 pounds. A breakdown of trout production by facility follows.

The seven state-owned hatcheries produced 771,961 pounds of trout in 2014-15. Except in years when production is affected by conditions such as drought, temperature and disease outbreaks, normal production averages 750,000 pounds per year. Given the present state of hatchery facilities available, this level of production is considered near capacity. Production greater or lesser than this reflects unusual situations.

The federal hatchery at White Sulphur Springs provided 5,985 pounds of trout during 2014-15. This is the only federal hatchery remaining in West Virginia. The poundage of trout provided in 2014-15 is less than previous years from this facility. Trout available from White Sulphur Springs Hatchery varies annually due to changes in facilities operation.

Trout stocking also occurred in 11 Class Q waters that provide fishing opportunities for those with disabilities and children age 10 and younger. These special regulation waters were stocked the first week of March and additional stockings were made at some Class Q locations.

Thirty-four waters received two stockings each during a two-week period in October. The 2014 fall stocking totaled 44,580 pounds. This poundage is more than originally proposed for the 2014 fall stocking season due to the good growth and surplus fish numbers. The fall trout stockings are very popular and provide fishing opportunities through the fall and winter months until the regular spring stocking schedule begins.

Wild trout management continues to receive special attention in West Virginia. The program is divided into two major parts — protecting and enhancing native brook trout populations and stocking fingerling trout to establish and maintain wild trout populations in streams that will not support stream reproduction. In 2014-15, 283,325 fingerling trout were stocked in 50 waters. Of these, 135,325 were brown trout stocked in 50 waters around the state. This program has resulted in considerable expansion of wild trout populations in West Virginia, particularly in southern West Virginia waters, where traditional trout waters are not present. Many of these southern trout fisheries are dependent on cold, unpolluted discharges from underground mines. Additionally, nearly 148,000 surplus rainbow fingerlings were stocked in Stephens Lake of Raleigh County in an attempt to establish a two-story, cold and warmwater, fishery. Approximately 35,550 fingerling rainbow trout were also stocked in the North Branch of the Potomac River to maintain a year-round catch-and-release fishery. The wild trout program provides anglers with year-round recreational opportunities in areas of West Virginia previously lacking such angling opportunities.





## WILDLIFE DIVERSITY PROGRAM

### State Wildlife Action Plan (SWAP)

The entire Wildlife Diversity Unit staff was involved in the 2105 revision of the State Wildlife Action Plan. Essential tasks included:

- Development of a list of species of greatest conservation need (SGCN) and assigning priority ranks to the SGCN species.
- Identification of SGCN-habitat associations.
- Identification of threats to SGCN and associated habitats.
- Development of recommended conservation actions to address threats.
- Development of monitoring objectives.
- Identification of Conservation Focus Areas (CFAs) where primary conservation efforts will occur.
- Coordinate public outreach open houses to present the draft SWAP.
- Final proofreading and editing of the manuscript.

### Ornithology

#### American Kestrel

American kestrels, though common rangewide, occur locally in West Virginia and appear to be limited by a lack of available nest cavities. Much highly suitable habitat is likely unoccupied during the breeding season due to this constraint. In partnership with WVU and the Avian Conservation Center of Appalachia, WRS staff constructed 100 American kestrel nest boxes in 2013 for deployment in suitable habitat in the north/central region of the state.

- 61 of 100 boxes have been installed in Barbour, Fayette, Harrison, Marion, Monongalia, Ohio, Preston, Ritchie, Tyler, Upshur and Wetzel counties
- 16 boxes were installed in 2015
- In 2015, three boxes fledged 15 young of 52 boxes monitored

Because it can take a number of years for pairs to begin using deployed boxes, low initial occupancy might not be a predictor of future use. Partners will continue to deploy and monitor boxes in coming years.

#### American Woodcock

American woodcock is an upland game species associated with wet meadows and early successional habitats. In West Virginia, and the eastern region as a whole, this species has been declining at a steady rate of 1.1 percent each year since 1968. As part of the U.S. Fish and Wildlife Service American woodcock singing ground survey, DNR staff ran 24 routes statewide and detected 16 birds for an average of 0.67 males/route. Hierarchical models suggest that this is the lowest since the survey began (American woodcock population status, 2015, USFWS)

#### Bald Eagle

Staff and volunteers monitored 56 (Vs. 53 in 2014) bald eagle nest sites in 2015 in Berkeley, Brooke, Cabell, Gilmer, Grant, Greenbrier, Hampshire, Hancock, Hardy, Jackson, Jefferson, Mineral, Monongalia, Morgan, Pendleton, Pocahontas, Raleigh, Summers, Taylor, Tucker, Tyler and Wood counties. Due to continued increases in the number of nests, DNR staff and volunteers are generally now monitoring nests once per breeding season to assess activity and productivity. Seven new nests were documented in 2015 (Vs. eight in 2014) in Brooke, Gilmer, Grant, Mineral, Monroe and Pocahontas counties.

Of the 56 nests monitored, 45 were active (Vs. 40 confirmed active in 2014) and an additional four sites were uncertain due to various causes. These include new nests replacing existing destroyed nests that were not located, inactive nests but adults present in the area, or recently active nests that were not monitored due to various constraints.

Of the 45 active nests, 26 fledged at least one young (Vs. 28 in 2014), four nests failed (Vs. three in 2014), and 14 were monitored during incubation and/or brooding and we were not able to assess productivity (Vs. nine in 2014).

There were numerous reports in 2015 of non-breeding birds statewide. The southern West Virginia winter eagle survey was held Jan. 10, 2015, and 56 bald eagles of various ages were located (Vs. 14 in 2014). The Ohio River Islands National Wildlife Refuge winter bald eagle survey Jan. 8, 2015, detected eight eagles: five were adults and three were immatures.

Three dead or injured bald eagles were recovered from Hardy, Grant and Pendleton counties. All three had evidence of injuries from conspecific altercations or possibly gunshot. Additionally, a nestling was recovered in Mineral County and successfully rehabilitated.

Bald eagles continue to recover and recent breeding season observations in the Tug, Little Kanawha, Greenbrier, Bluestone and New River watersheds as well as along the Ohio River suggest a larger breeding population than currently understood. Abundance is also likely greater than documented in Tucker, Barbour and Taylor counties and in the Elk watershed. It is unknown whether there is a breeding population in the southwestern counties and a survey of the Guyandotte, Tug Fork and impoundments/lakes in February and March is recommended if/when resources allow. Poor water quality might be a limiting factor in these areas.

#### **Bank Swallow**

Following the conclusion of the 2nd West Virginia Breeding Bird Atlas, DNR staff and volunteers have begun documenting and monitoring bank swallow colonies to better assess preferred microhabitat as well as active size and duration of colonies. A single active colony was confirmed in Putnam County in 2015.

#### **Barn Owl**

Barn owl is a poorly understood species found in grassland and town habitats in the Ohio floodplain, Greenbrier Valley, South Branch Valley, Canaan Valley and eastern and northern panhandles. Distribution and abundance is likely greater than the evidence below suggests.

In 2015, barn owls were observed in DNR nest boxes at two sites in Jefferson and Wood counties. Additional evidence includes a bird observed on a silo near Moorefield, adults and young at a silo south of Moorefield, and pellets in barns and silos in Greenbrier, Jefferson, Pendleton and Pocahontas counties.

#### **Cerulean Warbler**

The cerulean warbler is a bird of extensive mature, structurally complex forests. In West Virginia, this species is widespread but declining at an annual rate of ~2.25 percent since 1966. Despite this decline, it is estimated that West Virginia houses ~35 percent of the global breeding population of the species (Partners in Flight population estimate database).

In 2015, the Appalachian Mountains Joint Venture and regional partners (including DNR) applied for and received \$8 million from the newly created USDA Regional Conservation Partnership Program. The 5-year grant will follow the Working Lands for Wildlife model (currently being used to enhance golden-winged warbler habitat) and provide training and funding to enhance cerulean warbler habitat on private lands in five states.

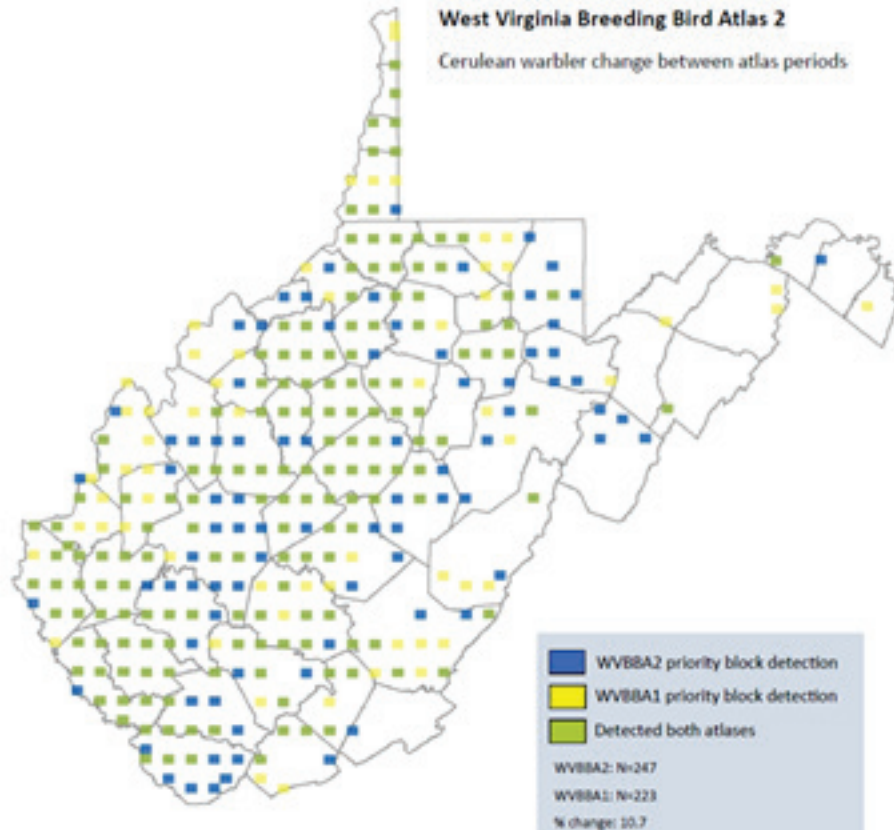
DNR staff are assisting in the planning and implementation of a management workshop slated for October 2015. The three-day workshop will conclude with field visits to nearby sites where cerulean warbler and other species occur.





A full-time state coordinator position has been created to implement the project in West Virginia for the 5-year grant term.

Finally, one of the first “change maps” from the recently-completed breeding bird atlas was created for the cerulean warbler:



### Eastern Whip-poor-will

The eastern whip-poor-will is an aerial insectivore found in woodlands and woodland edges statewide except for the northern panhandle and the Allegheny highlands. The species is in decline over much of its range. Due to its nocturnal nature, eastern whip-poor-will is generally not adequately surveyed by BBS or Breeding Bird Atlas projects.

In 2013, DNR staff attempted to increase coverage for this species by distributing a news release to outlets statewide. It was met with huge success, and continued in 2014 and 2015. Hundreds of reports were received by staff in 2015.

### Golden Eagle

DNR Wildlife Diversity and Game Management Units, State Forests, the Monongahela National Forest, the U.S Army, West Virginia University personnel, and private citizens maintained 14 trail camera locations established to assess the wintering golden eagle population in West Virginia.



The trail camera survey project has been ongoing in West Virginia for several years. Fewer camera locations were surveyed in 2015 due to a shortage of staff. All 14 camera locations documented golden eagle presence. The trail camera project will be scaled back to a few locations located strategically across the state to monitor winter golden eagle presence.

Two dead golden eagles were collected by DNR staff in Hardy and Grant counties. Causes were vehicle collision and entanglement in a barbwire fence. The latter is highly unusual and test results for lead exposure as an exacerbating factor are pending.

In 2015, DNR staff collaborated with WVU Cooperative Research Unit and members of the Eastern Golden Eagle Working Group to develop a winter roost tree survey. Using GPS data points, the WVU Cooperative Research Unit identified frequently used winter roost trees. DNR staff developed field methods to locate the roost tree and describe the habitat used by wintering golden eagles. The objective of the winter roost tree survey is to describe micro-habitat used by wintering golden eagles.

### **Golden-winged Warbler**

DNR staff and partners worked to implement the USDA-sponsored “Working Lands for Wildlife” program. This program supports small landowners for creation of early-successional habitat suitable for the fast-declining species. In 2016 staff will work to increase landowner outreach and awareness of the program.

In 2015:

- Staff conducted 64 new site visits in Greenbrier, Monroe, Nicholas, Pocahontas, Preston, Randolph and Upshur counties
- 11 sites were monitored for species presence
- Of 18 interested landowners, four contracts were initiated and reached funding approval
- Five contracts were completed in Greenbrier, Pocahontas, Randolph and Summers counties
- Staff partnered with West Virginia Division of Forestry, Natural Resources Conservation Agency, National Wild Turkey Federation and West Virginia University staff on project coordination and implementation

Staff efforts were highlighted in a press article on the USDA website:

<http://blogs.usda.gov/2015/07/14/through-partnerships-golden-winged-warbler-thrives/>

### **Great Blue Heron**

Great blue heron is a colonial breeder that nests in rookeries near or adjacent to water bodies of various sorts. These rookeries can persist for many years. During the nonbreeding season birds wander widely in search of hunting sites.

During the West Virginia Breeding Bird Atlas, 27 heron rookeries were located statewide. In 2015, staff migrated these data into a newly designed bird database, and future reports of rookeries will be confirmed and documented.

### **Loggerhead Shrike**

Loggerhead shrike is West Virginia’s most threatened breeding grassland/shrubland bird species. This species is generally only found in pastures with a thorny shrub component, short grass and an abundance of natural and artificial hunting perches. The estimated current breeding population in West Virginia is no more than 20-30 pairs. Loggerhead shrike is declining across its range, and the drivers of this negative trend are poorly understood.





Staff monitored 20+ historic/recently-active loggerhead shrike sites in 2015 in Grant, Greenbrier, Hardy, Jefferson, Monroe, Pendleton and Pocahontas counties. Shrikes were observed at eight of these sites. Breeding pairs were located at seven of these sites and successfully fledged young were found at at least three. Productivity remains very low, with no pair fledging more than three young. An additional credible report was received of a shrike in Greenbrier County near Renick. Nonbreeding birds (late winter, early spring and late summer) were detected in winter 2014/2015 in the Old Fields area of Hardy County and at multiple sites in the Greenbrier Valley.

Staff continued to work with partners from nearby states and Ontario, Canada, in the coordination of a loggerhead shrike working group. Staff worked with partners to refine drafts of a conservation action plan and guide work with this species between partners. In fall 2014, staff co-led a formal working group meeting as part of the SE/NE Partners in Flight conference in Virginia Beach, Virginia.

#### **Northern Harrier**

Northern harrier is a raptor most often associated with open areas and wetlands. In West Virginia, this species is regular in winter in suitable habitat.

Successful breeding was first confirmed in the state at Canaan Valley National Wildlife Refuge in 2012 after years of breeding season observations of birds in the area. Monitoring in 2013, 2014 and 2015 has confirmed that birds remain present in the valley during breeding season, though no additional nest sites have been located. This is almost certainly a product of insufficient effort. It is suspected that at least two pairs breed in the valley in any given year.

#### **Northern Saw-whet Owl**

The true distribution and abundance of our smallest owl species has long been an open question. Northern saw-whet owl breeding habitat usually, but not always, includes a conifer component. During the West Virginia Breeding Bird Atlas 2 survey period, this species was detected at 13 locations statewide, including nest boxes monitored by DNR staff and volunteers on Briery Knob and at Blackwater Falls State Park. However, playback surveys were only conducted in a small subset of blocks containing suitable habitat.

In 2015, DNR initiated a 2-year research effort to better delineate distribution and habitat for the species using playback and modelling. Results for the breeding season survey in 2015:

- 308 points were surveyed. At each point, a 15-minute passive listening period was followed by 15 minutes of recorded calls.
- Northern saw-whet owl was detected at 55 of these points, or 17.9 percent.
- Birds were detected as far north as Cooper's Rock State Forest and south to Pipestem Resort State Park.
- Most birds were detected at high elevation in mixed spruce/northern hardwood habitats.

This survey confirms that northern saw-whet owl is more abundant in West Virginia than previously understood. In the coming year, habitat will be modeled in an attempt to estimate the size of the breeding population.

#### **Olive-sided Flycatcher**

Olive-sided flycatcher is a long-distance migrant that breeds in boreal and conifer forests and wetlands and winters in Central and South America. It reaches its extreme southern breeding limit at highest elevations in the red spruce forest in West Virginia. This species is in steep decline, and causes are poorly understood.

During the first WV Breeding Bird Atlas (completed in 1989), this species was detected at three sites in Pocahontas and Randolph counties. After an extended period of years with no breeding season detections, breeding olive-sided flycatchers were once again detected in 2013 at Cranberry Glades in Pocahontas County.

DNR staff and volunteers have been monitoring this site since 2013. In 2014, two breeding pairs with young were located. In 2015, once again, two breeding pairs were located. In coming years, additional sites should be monitored, including blister run swamp and other bog habitats with scattered tall conifers and snags.

### **Peregrine Falcon**

Our largest falcon, the peregrine, breeds on scarps, in quarries, and in recent years mostly on man-made structures. These structures include dams, bridges, industrial sites, and possibly buildings in urban areas. The species is experiencing a long, slow recovery following DDT impacts during the 20th century.

During breeding season, DNR staff and volunteers detected peregrines at sites in Fayette, Grant, Kanawha, Mason, Pleasants, Summers and Wood counties. Pairs were located in Fayette, Mason and Pleasants counties.

Outside of breeding season, falcons were observed at sites in Cabell, Grant, Hancock, Hardy, Jefferson, Kanawha, Mason, Mercer, Monongalia, Ohio, Pleasants, Putnam, Taylor, Tucker and Wood counties.

### **Rusty Blackbird**

Perhaps no songbird has declined as steeply as the rusty blackbird. In the past 50 years, populations have declined by more than 90 percent. Causes for this decline are poorly understood. This species breeds in boreal bogs and winters in the southern U.S.

In West Virginia, rusty blackbird is a local and rare winter resident and more commonly seen during fall and spring migration. WVDNR staff and volunteers participated in the annual Rusty Blackbird Spring Migration Blitz in March 2015. Twenty-three observers reported blackbirds from 15 counties. These included Cabell, Grant, Hardy, Jefferson, Kanawha, Pocahontas, Preston, Putnam, Randolph, Ritchie, Summers, Taylor, Tucker, Wetzel and Wood counties.

The 23 observers submitted 48 different positive reports of rusty blackbird. The most well-represented counties included Preston with 16 reports, Jefferson with seven reports and Pocahontas with six reports.

The 23 observers collectively tallied 381 individuals. The single largest flock comprised 65 individuals reported at Canaan Valley Resort State Park March 26. Large flocks were not the norm. Of the 48 different reports, 38 of them tallied fewer than 10 birds.

The two most reliable locations for observing rusty blackbird was the Upper Deckers Creek watershed of Preston County and Altona Marsh in Jefferson County.

Additionally, a flock of 100+ wintering rusty blackbirds was detected during the Charleston Christmas Bird Count.

### **Upland Sandpiper**

Staff monitored a site (active in 2012) near Cabins in Grant County during the 2015 breeding season. No birds were detected. As with loggerhead shrike, roadside bias likely limits detection of this species.





### **Breeding Bird Survey**

The USGS-sponsored Breeding Bird Survey program (BBS), initiated in 1966, is a primary tool in the United States for assessing long-term changes in distribution and abundance for numerous bird species. The survey consists of randomly distributed 25-mile driving routes. Each route contains 50 stops, at which a 3-minute timed survey is conducted. West Virginia currently has 55 routes.

The BBS has traditionally been coordinated by volunteers in West Virginia. In light of a declining and aging birding community statewide, WVDNR staff assumed these duties in 2015 in an effort to increase volunteer participation and the total number of routes surveyed annually. In 2014, 40 routes were surveyed. This number was increased to 45 in 2015. In 2016, staff will attempt to increase this number by an additional five routes.

DNR staff participated directly in surveying seven routes in 2015. The number of survey routes will likely increase in coming years.

### **WV Breeding Bird Atlas 2**

The final field season of the six-year atlas project was successfully completed. Staff coordinated agency activities, volunteer efforts and contracts and grants to assist the project and completed numerous days of field work to gather atlas data for breeding confirmations and abundance counts. Priorities have now shifted to summary and analysis of the dataset, as well as outlining and writing chapters and species accounts for the upcoming book.

#### **Final atlas summary:**

- Project duration of six years.
- Abundance sampling completed on more than 400 priority blocks.
- Total bird observations for the entire atlas period now stand at 106,816.
- More than 20,000 hours of volunteer effort logged by 378 participants.
- More than 165,000 miles driven by volunteers while atlasing.
- 179 species reported, 164 species confirmed breeding.
- 2,075 of 2,766 blocks received data. All priority blocks received data.

### **Christmas Bird Counts**

The Audubon-sponsored Christmas Bird Count (CBC) serves as a counterpart to the Breeding Bird Survey for tracking long-term changes in winter bird distribution and abundance. CBC surveys are based on 15-mile diameter circles. There are currently 20 CBC circles in West Virginia.

### **WV Bird Records Committee**

Staff represented DNR on the committee.

### **Winter Bird Count**

The survey was continued and fall 2015 marks the beginning of the 27th year of the count. More than 100 tally forms were received from participants statewide.

### **Ornithology Work completed in 2015:**

- DNR staff proofed and corrected all distribution and abundance data.
- A contract with the Conservation Management Institute (CMI) in Blacksburg, Virginia, was finalized. CMI will produce statistical, summary/analysis and mapping products for inclusion in the forthcoming book.
- An atlas author meeting was held where support materials and style guidelines were discussed and distributed.

- Work is ongoing on species accounts and other chapters. Drafts of dozens of species accounts are now complete.

## WV Butterfly Atlas

Work continued on the West Virginia Butterfly Atlas. Staff conducted three formal atlas trainings and several one-on-one trainings. Eighty-one volunteers and 20 cooperators have been trained since 2012. During the 2014 field season, 25 volunteers and cooperators submitted 1408 specimen or photographic vouchers. Participants surveyed in 46 counties and documented 86 species of butterflies (64 percent) and 22 species of targeted moths (32 percent). Surveys documented 152 county records for butterflies and targeted moths. Since the start of the Atlas in 2012, participants have updated 918 historic records of butterflies and targeted moths.

All vouchers from the 2014 field season were entered into a database. All locations were confirmed and coordinates generated if needed. The online Data Entry Portal was used by many volunteers, making submission of data easier for participants and more accurate for data entry. A newsletter was written and distributed to participants and other interested parties. All participants received copies of their data and additional materials for the 2015 field season if needed.

## Mussels

Three long-term monitoring sites were re-assessed and two new sites were established during FY14-15. The re-assessed sites included the New River at Thurmond, Kanawha River at Watson's Island and the Greenbrier River below Thorny Creek. Sites established were on the Little Kanawha River at Annamoriah and the Cacapon River at Great Cacapon.

The long-term monitoring site was established on the New River at Thurmond in 2008. Due to high flows, we were not able to re-survey it at the five-year interval in 2013 and thus it was surveyed in 2014. As this site is located upstream of Kanawha Falls, diversity is naturally low and only two live species (Mucket and Purple Wartyback) were observed during both systematic surveys. The overall density of the bed appeared unchanged. Substrate characterization was assessed and habitat also appeared unchanged over the six year period.

The long-term monitoring site on the Kanawha River at Watson's Island was established in September 2008. This site is located in the Marmet Pool near the community of Shrewsbury. This area was selected for monitoring due to the number of mussels observed during previous transect surveys conducted in 2006 and 2007 which included the federally endangered Fanshell. A smaller area was re-surveyed in July 2014 using the same methodology except that all samples were excavated. A slightly higher mussel density was observed in 2014 which could have been a result of the extra excavations. The dominant species collected was the Three-horned Wartyback in 2014 compared with the Elephant-ear in 2008.

A long-term monitoring site was established in 2003 within a backchannel area of a gravel bar on the Greenbrier River downstream of Thorny Creek, Pocahontas County. While the overall density of bivalves remained the same at 0.08/m<sup>2</sup>, the number of live Green Floaters was reduced by 50 percent. Only 10 live Green Floaters were found in 2014 compared to 20 observed in 2009. Substrate characterization was also assessed and the site continued to be dominated by gravel.

The Little Kanawha River at Annamoriah was a site selected for restoration activities (described below) following characterization of the mollusk community in 2013. In 2014 a quantitative survey was conducted using the three random start systematic survey methodology. Fourteen species were recorded at this site over the two year period, including the federally endangered Snuffbox.





In June 2015, a long-term monitoring site was established on the Cacapon River at Great Cacapon. A 5m by 5m mark/recapture site was established and this site to compliment other survey methodologies being used by an NCTC mussel class. This site will be monitored in the future by the class with data provided to the DNR.

In August 2012, federally endangered Northern Riffleshell mussels were collected from the Allegheny River, Pennsylvania, within an area to be salvaged for bridge demolition. These mussels underwent quarantine at White Sulphur Springs National Fish Hatchery (WSSNFH) prior to being stocked in the Elk River at Queen Shoals long-term monitoring site. Since that time, several stocking events have occurred and also included the federally endangered Rayed Bean. Otter predation at the site threatens to jeopardize restoration efforts as well as the resident mussel population. This site is slated for full monitoring in 2015.

A large bridge construction project on the Allegheny River in Pennsylvania (Hunter Station) is requiring the salvage and subsequent relocation of numerous federally endangered Northern Riffleshell and Clubshell. In order to avoid a jeopardy decision by the USFWS, the mussels are to be used for species restoration efforts throughout several states. In order to receive federally listed mussels for restoration, pilot studies have been required which consists of stocking 50 to 100 individuals of each species at a site and monitoring survival over a year. During fiscal year 2014/2015, several pilot studies were monitored and additional studies undertaken. Sites were selected for restoration and pilot populations were stocked and assessed. All mussels were tagged with glue-on shellfish tags and PIT tags. Populations assessed thus far appear to be doing well. Thus far pilot studies have been established at three sites on the Ohio River (RM 284, Muskingum Island and Buckley Island), Little Kanawha River at Annamoriah, Middle Island Creek at Falls Mills, and Kanawha River at Kanawha Falls.

The Ohio River Restoration Project for mussels continued. This project is funded from a settlement for the 1999 mussel and fish kill allegedly caused by the Eramet/Elkem chemical spill near Parkersburg. In cooperation with the USFWS, time was spent collecting mussel broodstock for propagation. These animals are distributed to cooperators including Tennessee Tech, Kentucky Department of Fish and Game, Genoa National Fish Hatchery (GNFH), Ohio State University and WSSNFH. In 2014, five gravid Sheepnose were provided to OSU/CZ & KYDFG for use as broodstock. Access to the Ohio River in 2014 was limited due to high flows and these mussels were collected from the Kanawha River at Kanawha Falls. They were later returned. 2013 marked the first stocking of the federally endangered Pink Mucket with more than 400 stocked at Muskingum Island. An additional 250 juveniles were stocked in 2014 and two individuals from the 2013 stocking were observed. The Pink Muckets were propagated by Tennessee Tech University. All mussels were tagged before being stocked into the Ohio River. Although Elephantear mussels were also targeted for broodstock collecting, none were found gravid.

The Dunkard Creek Restoration Project was initiated in 2012. This project resulted from settlement of the fish and mussel kill by Consol Energy in Monongalia County. By August 2011, four of the six planned long-term monitoring sites were established. No live native mussels were found. Restoration plans consist of stocking fish inoculated with mussel larvae and re-introducing adults salvaged from projects in West Virginia and Pennsylvania. In September 2014, approximately 1,600 common mussels salvaged from French Creek, Pennsylvania, were transported and temporarily quarantined at the USFWS Middle Island facility, Pleasants County until stocking. These animals were stocked at the Worley and Pentress sites on Dunkard Creek. Also during 2014, 453 Wavyrayed Lampmussels propagated at WSSNFH were received. These animals were transported and housed at the Palestine Fish Hatchery in June 2014 for grow-out prior to stocking. The surviving 370 individuals were stocked into Dunkard Creek in September at the Worley site. Bluegill were used to host larvae of Plain Pocketbook mussels and were stocked at two locations on Dunkard Creek. Assisted by District 1 Fisheries, freshwater drum were electro-fished from the Monongahela River and used to host Pink Heelsplitter larvae and

subsequently stocked at two locations on Dunkard Creek. Broodstock mussels were tagged and released into Dunkard Creek.

In September 2014 a small impoundment within one of the mining operations in the Dunkard Creek Watershed had a failure and released high conductivity water into Miracle Run. Our upstream most restoration site was visited at Blacksville and no mortality was noted as a result of the spill. The four monitoring sites established in 2011 were re-surveyed in 2015. Although no reproduction was noted, live previously stocked individuals were observed with limited mortality. Reconnaissance of the lower reach of Dunkard Creek was conducted and a monitoring site was selected but no monitoring was conducted.

The Wildlife Diversity Unit conducted a mussel survey on the Kanawha River at the Buffalo boating access site in July 2014. The access site was to be replaced and therefore the survey was conducted using the West Virginia Mussel Survey Protocol. One-hundred-ninety-five mussels of 10 species were collected during the survey. No federally endangered species were observed. A report was submitted to the USFWS and concurrence was obtained for mussels to be relocated from the area of direct impact and associated buffers. Three-hundred-twenty-eight mussels of 13 species were relocated just downstream of the access area.

The Belleville Pool of the Ohio River is currently known for its high diversity, high density mussel beds, from Muskingum Island upstream to Willow Island Lock and Dam. In 1999, a toxic release in the river significantly impacted the mussel resources downstream of Muskingum Island. This area is now recovering including federally endangered species, especially the Fanshell. The Blennerhassett Island Historical State Park is located within this impact area. The park planned to improve their public access with the installation of docking structures. As a result of the potential to impact mussel resources, a mussel survey was required. The Wildlife Diversity Unit, with the assistance of the USFWS, conducted the survey per the West Virginia Mussel Survey Protocol. Poor habitat in the area of the proposed structures contained a very low density, fair diversity mussel population. A report was submitted to the USFWS and concurrence was provided for construction activities to be conducted.

Additional mussel surveys were conducted on the following streams: South Fork Hughes River, North Fork Hughes River, Hughes River, Cacapon River, Tug Fork River and Pigeon Creek.

#### Other Mussel Activities:

- Reviewed and commented on mussel issues on numerous stream activity requests.
- Revised the West Virginia Mussel Survey Protocol.
- Continued development of a Statewide Scientific Dive Safety Plan.
- Coordinated and participated in annual diver fitness tests for agency divers and partners.
- Attended the Ohio River Valley Mollusk Group Meeting.
- Participated in annual COE maintenance dredging webinar.
- Attended the bi-annual symposium of the Freshwater Mollusk Conservation Society.
- Staff attended the Mid Atlantic Aquatic Biologists Meeting.
- Staff participated in the Chesapeake Bay Watershed mollusk webinar.

## NATURAL HERITAGE PROGRAM

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### Ecology Group

The Ecology group continued work to characterize, classify, map and protect the natural terrestrial communities in West Virginia. During the fiscal year DNR ecologists sampled 74 vegetation plots, concentrating on poorly sampled areas and poorly sampled habitats throughout the state. In spring 2015, surveys were focused on short leaf pine (*Pinus echinata*) stands, working on public and private





forest lands to expand our knowledge of these rare and declining forests from the Western Allegheny Plateau to the Cumberland Mountains and Ridge and Valley. Our database now includes data from more than 4,500 vegetation plots well distributed across the state's geography and ecosystems. They form a strong foundation for completing a vegetation classification for the state.

Progress on a statewide vegetation classification was highlighted by a comprehensive review of Associations in the U. S. National Vegetation Classification (USNVC) that have been attributed to or are likely to occur in West Virginia. One hundred seventy-two associations are verified in the state by our plot records or other authoritative evidence. Seventeen associations are probable in the state, but have not yet been documented. Twenty-five associations are possible, but not documented. Thirty-seven associations were attributed to the state but are unlikely to occur here. In consultation with ecologists from NatureServe, changes were made to the distributional records in the USNVC central databases.

Ecologists applied a coarse-scale statewide classification of West Virginia's terrestrial habitats for the State Wildlife Action Plan. This involved simplification and correction of known errors in existing regional ecological system classification and map products. In-house GIS maps of shale barrens, heath-grass barrens, and spruce forests were completed and incorporated. Statewide descriptions were written for 19 habitat types and a statewide GIS terrestrial habitat map was produced. Ecologists then determined the habitats according to this system for the 479 rare plant species tracked by the West Virginia Natural Heritage Program.

Ecology staff made significant contributions to wetland science and management in West Virginia. Wetlands along the Ohio River in Jackson, Wood and Pleasants counties were surveyed to assess their condition and suitability for designation as West Virginia exemplary wetlands. A large grant (\$700,000) was secured from EPA to develop a wetland functional assessment for the state; these funds were subsequently transferred to the Department of Environmental Protection (DEP).

Partnership activities included participation in the Central Appalachian Spruce Restoration Initiative (CASRI); attending the National Resource Conservation Service's annual soils field week to help correlate vegetation and soils; review of Macrogroups, Groups, Alliances, and Associations as part of NatureServe's revisions to the USNVC; and review of a U. S. Geological Society manuscript on riverscours ecosystems.

Ecology staff also made significant contributions to our knowledge of plant species in West Virginia. Numerous rare plant species were documented by vegetation surveys and information on 37 rare plant occurrences were added to the Biotics database maintained by the Natural Heritage Program. Rare plant discoveries by ecologists included new populations of the Threatened Virginia spiraea (*Spiraea virginiana*) and the endangered running buffalo clover (*Trifolium stoloniferum*), and a state record collection of sheep laurel (*Kalmia angustifolia*). Ecologists discovered a North American record for naturalized common juniper (*Juniperus communis* var. *communis*) and worked with the world expert to document this non-native population using DNA analysis. Ecologists completed a rare plant survey of Army Camp along the New River on contract with National Park Service, relocating seven known species and documenting 11 rare plant species not previously known from the site. Ecologists took the lead to review and revise state conservation ranks for West Virginia's rare plants in preparation for their inclusion as Species in Greatest Need of Conservation in the State Wildlife Action Plan. Staff responded to numerous requests from within our agency, from other government agencies, academic researchers, and from the public to identify plants, often from vegetative scraps or digital photographs.



Ecology staff participated in numerous outreach and educational events including leading field trips for the Wildflower Pilgrimage; teaching Master Naturalist classes on wildflowers; teaching plant identification for a Threatened and Endangered Plant Workshop; presenting on reference conditions for red spruce forests on a field trip for members of CASRI; and speaking about rare forest Associations at the West Virginia Forest Stewardship Training Workshop sponsored by the Division of Forestry.

## Botany

### Endangered Plants

Throughout the growing season of 2015, a limited amount of monitoring surveys of six federally listed endangered or threatened plant species were conducted using substantial funds from the U.S. Fish & Wildlife Service (USFWS) under the Endangered Species Act, Section 6.

Botanical staff continues to consult with all federal agencies in West Virginia concerning the location, identification and conservation action needed to comply with the federal Endangered Species Act in their projects and on their managed landscapes. We responded again to requests for updates and redistribution of the current list of approved surveyors for federally listed T&E plant species in West Virginia through the West Virginia Field Office of the USFWS.

### Running buffalo clover (*Trifolium stoloniferum*)

Natural Heritage Program personnel accompanied a representative of Brookfield Renewable Power to conduct a monitoring assessment of the Cotton Hill site of running buffalo clover (listed endangered) on May 28, 2015. The site is located along the New River, downstream of the Hawks Nest Hydroelectric facility. This site was the first occurrence of running buffalo clover discovered in West Virginia, and at one time had nearly 100 rooted crowns present. Brookfield submits an annual report to the Federal Energy Regulatory Commission on the status of the federally listed endangered plant species in compliance with its license agreement to run its Hawks Nest facility.

For several years, no plants were found at the Cotton Hill site until one rooted crown was seen in 2012 and 2013. In 2014, Wildlife Diversity staff and Brookfield personnel counted nine rooted RBC crowns. In 2015, Natural Heritage Program staff and Brookfield personnel observed 50 rooted crowns with 12 flowering stems and numerous stolons.

Brookfield staff had been interested in restoring the population of running buffalo clover to the Cotton Hill site by taking advantage of seed supply in the cold seed bank storage system within the Center for Plant Conservation (CPC) at the Center for Conservation & Sustainable Development, part of the Missouri Botanical Garden in St. Louis. However, with the natural restoration of the population of RBC at Cotton Hill, Brookfield staff, DNR staff, and the staff of the West Virginia Field Office of the USFWS agree that it is more desirable to continue to encourage the natural restoration of the small population of RBC without using CPC stored seeds.

### Shale Barren Rockcress (*Arabis serotina*)

Eight occurrences of the endangered shale barren rockcress in Greenbrier County were monitored in August of 2015. Shale barren rockcress (SBR) continues to be threatened by the consequences of climate change and the invasion by non-native invasive plant species, such as spotted knap weed, Japanese stilt grass and garlic mustard. Natural Heritage Program staff consulted with personnel from US Navy Information Operations Command and the National Security Administration regarding the management of the SBR population located on the Little Fork Shale Barren which is located on the base property. Natural Heritage Program continues to support their personnel in the control of the invasive species Japanese stiltgrass above and below the Little Fork shale barren.





DNR and the U. S. Navy, Naval Facilities Engineering Command engaged in two cooperative agreements begun in 2012 and 2013 that involve the use of time lapse cameras to document the life history of shale barren rockcress population on the Little Fork Shale Barren. The cooperative agreements terminate in 2015.

#### **Harperella (*Harperella nodosum*= *Ptilimnium nodosum*)**

Over the past 10 years, Natural Heritage Program personnel have documented the decline of the federally threatened harperella on three streams in Morgan County (Cacapon River, Sleepy Creek and Back Creek). Monitoring survey data indicates that sometimes dramatic changes in the structure of the streams is altering or removing the silt/sand/cobble bars that supports harperella in those streams, likely due to changes in the “flashiness” and intensity of floods, and perhaps the effects of freeze-thaw production of ice jams in winter months. Fortunately, harperella also thrives on cracks in bedrock, silt accumulations between boulders along the stream, and sometimes even clay banks along the streams. Limited success has been accomplished in attempts to transplant harperella plants in the rivers.

#### **Northeastern Bulrush (*Scirpus ancistrochaetus*)**

Northeastern bulrush (NB) occupies shallow ponds on sandstone ridges underlain with calcareous rock layers in the Eastern Panhandle of West Virginia. It is federally listed as an endangered plant species, and staff has been monitoring it on private and public lands, and cooperatively managing one population on the George Washington/Jefferson National Forest. No monitoring visits were made to NB sites by our program in 2013 and 2014 due to staffing limitations, but we hope to complete monitoring visits in 2015.

NB populations in West Virginia are declining in part due to succession that leads to canopy closure over the black ponds. Declines are also attributed to destruction caused all-terrain vehicle.

#### **Small Whorled Pogonia (*Isotria medeoloides*)**

The small whorled pogonia (SWP), an orchid, was added as a threatened species to the federally list in 1982. In 1994, it was reclassified as threatened. In August 2012, a consulting botanist discovered a new population of SWP in Randolph County on the property of the Monongahela National Forest, and within the path of a segment of a planned federal highway. In June of 2013, two flowering plants were found, and matured to fruiting stage within two weeks. Another 11 vegetative plants surrounding the two larger fruiting plants were documented, and within ¼ mile another large, double-flowered plant was discovered. In June 2014, five SWP plants were seen, three in fruit, most quite small (less than 4 inches tall). The second occurrence, a single plant within ¼ mile of the first, was not seen in June 2014. A second occurrence of SWP was discovered in Randolph County in 2015. Natural Heritage Program staff revisited both extant sites of SWP in May 2015, and found the same number of plants present that were seen in 2014.

#### **Virginia spiraea (*Spiraea virginiana*)**

Virginia spiraea (VS), a federally threatened species, is extant on four rivers in West Virginia: Bluestone, Gauley, Greenbrier and Meadow, and was historically known from sites on the Buckhannon, New and Monongahela Rivers. There is also one site in a wet meadow along Dingess Branch in the town of Glen Daniel. Another site is in the town of Eccles along Millers Camp Branch of the Marsh Fork of the Coal River.

In July guided rafts were used to access portions of the Gauley and Meadow rivers to access and monitor known VS populations. Occurrences were relocated and the populations were found to be robust with inflorescences and fruiting heads present. Where leaves and inflorescences had been scoured away by the exceptionally high water present on the Gauley River in July, plants were still identifiable by comparing scoured stems with nearby woody plants that did still have leaves on them.

Additional raft surveys are planned to complete monitoring on the lower Gauley section in October 2015. Monitoring on the Meadow River will be completed on foot. Surveys on the upper-most stretches of Meadow River and adjacent wetlands in Greenbrier County are planned for 2016.



**Botany Information and Education**

Two workshops were conducted in Elkins and Beckley in May to train consulting botanists/biologists in field identification, monitoring, and survey protocols for running buffalo clover, Virginia spiraea and small whorled pogonia. These workshops were designed to support the training of botanists/biologists who wished to eventually apply to the USFWS for inclusion on the list of approved T&E plant surveyors in West Virginia. More than 40 people attended the workshops. It is hoped that in the future, similar workshops can be conducted to train personnel from federal and state agencies and volunteer organizations such as the West Virginia Native Plant Society and the Master Naturalists.

A number of information and education programs related to native and invasive plants in West Virginia were conducted by the botanical staff, including Master Naturalist Program workshops about trees, shrubs, and woody vines in West Virginia, Wildflowers and Weeds in West Virginia, Recording, Sharing and Preserving Natural History Data, Nature Interpretation and Teaching, Invasive Plants, Navigating with Map and Compass, and Federally Threatened and Endangered Plants of West Virginia.

Botanical staff participated in the Wildflower Pilgrimage held annually at Blackwater Falls State Park on Mother’s Day weekend, and the annual West Virginia Celebration of the National Hunting and Fishing Days event at Stonewall State Park in September.

**Coordination and Cooperation with State Botanists**

In an important partnership that keeps critical data flowing into our databases, botanical personnel continued to work with curators of herbaria (museums of dried plant specimens) throughout the state. Curators of plant collections at West Virginia University, Marshall University, West Virginia Wesleyan University, Fairmont State University and Davis and Elkins College continue to work closely with our staff in updating, correcting, and cooperatively distributing botanical voucher specimen data and distribution data as requested.

**Scientific Collecting Permits, Environmental Review and Data Management**

**Scientific Collecting Permits**

Staff issued 320 Scientific Collecting Permits for a variety of projects including threatened and endangered species monitoring and presence/absence surveys, graduate student research and stream monitoring.

**Data Requests**

Staff responded in writing to 788 requests (table following) and many other requests by e-mail and telephone.

Type of request	Number
Coal Mining Lands inquiries	105
Abandoned Mine Land reviews	31
Natural gas projects	288
Division of Highways	190
Wind	2
Other	172
<b>Total</b>	<b>788</b>



Staff attended several meetings and conducted site visits with private consultants and state agencies regarding natural gas and highway projects, among others.

#### **Rare Species Database**

Rare species and plant community data continue to be entered into the Biotics database with records for threatened and endangered species being the priority. The database has been restored after a server crash and has been updated from Biotics 4 to Biotics 5. It is now Web-based and stored on servers maintained by NatureServe.

#### **Fishes**

Wadeable and small stream work continued to assess the status and distribution of West Virginia fishes. In addition, our team implemented a protocol for fish sampling non-commercial rivers; our methodology for large rivers using boat-mounted electrofishing equipment is based on modified Environmental Protection Agency protocols for the National Rivers and Streams Assessment. Much effort during the past year also emphasized gathering baseline data on streams affected by Marcellus Shale extraction (approximately 25 localities); conductivity loggers were deployed in four streams in the Middle Island Creek drainage to monitor possible effects of this gas development. A special project was initiated in 2014 to evaluate the status of the Candy Darter, a New River endemic, which may be soon listed as a Federally Endangered Species; this darter is disappearing due to hybridization with an introduced close relative (e.g., Varigate Darter).

In summary, 135 stream surveys were completed in 25 sub-watersheds, which fulfilled program needs for inventory, monitoring and other evaluation objectives of the stream assessment program.

#### **Spotted Skunk (*Spilogale putorius*)**

In 2015, WRS staff used trail cameras to survey for spotted skunks in Pendleton, Grant and Hardy counties. Thirty-eight sites were surveyed with more than 620 trap nights of effort. Spotted skunks were recorded at 12 locations. New records along the Hardy County/Shenandoah County line expand the known range in West Virginia.

#### **Outreach & Education**

Throughout the year and all over the state, presentations were given at elementary schools, middle and high schools, retirement homes, Girl and Boy Scout camps, Cub Scouts, day camps, church schools and camps, youth centers, children's centers, state parks, several countywide environmental and conservation day events, watershed associations and for the NWTF Jakes Day. Natural Heritage Program displays were present at Hooked on Fishing Not on Drugs and National Hunting and Fishing Days Celebration. Several Master Naturalists classes were taught at chapters around the state. Field trips were lead at the Wildflower Pilgrimage and Fox Forest WMA. Seven West Virginia Wild Yards were certified this past year. The West Virginia Wildlife Calendar sales for 2014 were 16,275.

#### **Miscellaneous Wildlife Diversity Program Activities**

Staff participated in monthly conference calls with the Southeast Association of Fish and Wildlife Agencies Wildlife Diversity Committee, and attended the Committee's annual planning meeting. Staff also presented on the Reptile and Amphibian Regulations at the Office of Surface Mining planning meeting.

## Endangered Species Program

### Bats

White-nose Syndrome (WNS), a condition that has killed millions of cave bats in the eastern United States and Canada, was first observed in West Virginia in January 2009. By the end of winter 2009-2010, WNS was documented in six counties: Greenbrier, Hardy, Jefferson, Mercer, Monroe and Pocahontas. By the end of winter 2011-2012, WNS had been observed in 14 counties in West Virginia, including nearly all counties with significant cave resources.

During winter 2014-15, winter bat surveys were conducted in 21 caves to monitor populations of hibernating bats including two endangered species (Indiana bat and Virginia big-eared bat). During these surveys, all bats present were counted. All sites visited were considered to be WNS-positive. While at these sites, program personnel assisted researchers from various institutions with WNS studies by collecting samples needed for ongoing research projects (swab samples from bats and the cave walls and hair samples from bats). At one site, samples were collected in fall, early winter and late winter to examine the progression of the fungus during the hibernation period. Because WNS can possibly be spread by people visiting caves, biologists conducting bat surveys followed disinfection protocols developed by the USFWS to clean gear and clothing between cave trips.

Hellhole, the state's most important bat hibernaculum, was surveyed in February 2015. During this survey, 1,623 little brown bats were counted in the Bat Room and the Shipp Room, but in previous surveys the same portions of the cave contained 57,809 little brown bats, making the decline at this site 97 percent since 2007. Indiana bats declined from 18,557 individuals in 2010 (the year WNS was detected at the cave) to 1,875 bats in 2015, a decline of 90 percent. However, Virginia big-eared bats continue to do well and are apparently not affected by WNS. The 2015 total was the highest on record with 12,036 Virginia big-eared bats counted in Hellhole. Perhaps the most disappointing finding this past winter was that bat populations were still declining and there was no sign of recovery or even of populations stabilizing. Between the 2013 surveys and the 2015 surveys, little brown bats and Indiana bats both declined an additional 26 percent and tricolored bats an additional 52 percent. Both little brown bats and tricolored bats have declined more than 95 percent from pre-WNS population levels.

During this year, the northern long-eared bat was listed by the USFWS as a federally threatened species due to population impacts caused by WNS. Because this species was common before the arrival of WNS, data for this species was not tracked in the rare species databases. Program personnel worked with the USFWS to compile capture records for the past several years so that data are available to be used in reviewing proposed projects.

In June 2015, female Virginia big-eared bats were censused at the 10 known maternity colonies. Night vision equipment was used to count these cave-dwelling bats as they left their roost to feed in the evening. The number of bats counted this June (8,633 individuals) was up 2.4 percent over the 2014 count and is the highest count on record. In summer 2014, Virginia big-eared bats were observed in a cave that historically harbored these species, but where this bat had not been seen in recent years. This summer, 239 Virginia big-eared bats were counted at this site. These data also suggest that, unlike other cave bat species, Virginia big-eared bats are not being impacted by WNS.





To gather data on the distribution and abundance of bats across the state and to document population changes caused by WNS, the DNR and USFS began establishing bat acoustic monitoring routes across the state in 2009. In summer 2012, 77 routes were run, most three times during the summer, for 5,842 mi of surveys. After 2012, most of the routes were run on an every-other-year basis with half of the routes run in 2013 and the remainder in 2014. In 2015, the routes run in 2013 were surveyed once again. In addition to the USFS, assistance in conducting acoustic surveys has been provided by USFWS West Virginia Field Office, USFWS National Wildlife Refuges, West Virginia Division of Highways, The Wilds, National Park Service, and the caving community and other volunteers. Myotisoft, LLC was contracted to analyze the acoustic survey data; analyses of the 2009-2013 data has been completed, and the 2014 data are currently being analyzed. Information gathered from this project will allow biologists to track changes in bat populations over time as WNS progresses and to locate areas where remnant populations of bats continue to exist post-WNS and, hopefully, areas where recovery is occurring.

WRS and USFWS personnel worked with Greer Limestone, Inc. to establish a monitoring plan to ensure that quarry expansion in Germany Valley will not negatively impact important bat caves, including the state's most important hibernaculum, Hellhole. Temperature and barometric pressure monitors were placed in Hellhole and Schoolhouse Cave and a weekly report of the results of this monitoring is sent to the WRS and USFWS, although there were some problems encountered because of lightning knocking out communication links. A report and video summarizing the past year of monitoring was provided to the DNR this past spring.

In summer 2011, a bachelor roost (all males) of Indiana bats was found under a bridge on the West Virginia Turnpike. This is the largest summer colony of this bat known in the state. These bats were monitored by WRS and West Virginia Division of Highways personnel to determine seasonal activity patterns at this site to assist with planning bridge maintenance. WNS has been detected in bats roosting under the bridge and to help assess survivorship of these bats, in August 2014, the Indiana bats using this roost were captured and banded so they can be identified in subsequent years. Recaptures of previously banded bats were noted and recorded.

Program biologists continued to work with wind power developers to reduce bird and bat mortalities at wind farms. The program project leader currently serves on three technical advisory committees established by the Public Service Commission for projects in Greenbrier, Mineral and Randolph counties. In 2015, the Pinnacle facility is conducting its third season of post-construction monitoring and looking at potential operational changes that may reduce bat mortality. The other two facilities are working with the USFWS to prepare Habitat Conservation Plans.

#### **West Virginia Northern Flying Squirrel**

The West Virginia northern flying squirrel was recently removed from the federal endangered species list, but this squirrel is still considered a Forest Sensitive Species on the Monongahela National Forest and the WRS considers it a Species of Greatest Conservation Need. West Virginia northern flying squirrel nest boxes were monitored by program biologists at 12 sites to obtain data on the distribution and population trends of this rare mammal. During this fiscal year, no northern flying squirrels were captured in fall 2014 and one squirrel was captured in spring 2015. Scat and hair samples collected this and previous years were provided to a researcher at Purdue University who is looking at genetics and food habits of this animal. Assistance was provided to a graduate student working with northern flying squirrels in West Virginia, Virginia and North Carolina. During this fiscal year, in addition to squirrels captured by WRS personnel, 14 northern flying squirrels were captured by consultants and U.S. Forest Service (USFS) biologists. All capture data on this species, including captures by other state and federal agencies and other researchers, were entered into the program's database and map files.

### **Cheat Mountain Salamander**

For the past several years, tissue samples (tail clips) from Cheat Mountain salamanders have been collected so that the genetics of this species can be examined. In 2013, the WRS and USFWS funded a graduate student at University of North Carolina to analyze these samples. This work is ongoing and an interim progress report was received in fall 2014.

### **Flat-spined Three-toothed Land Snail**

A significant amount of habitat for this species was acquired last year, which is now the Cheat Canyon Wildlife Management Area. The trail through this property was walked this year to map potential habitat for the snail along the trail.

### **Diamond Darter**

The diamond darter is a federally endangered fish extant only in a portion of the lower Elk River in West Virginia. WVDNR biologists assisted a crew from West Virginia University in conducting night-time surveys for this fish in September 2014.

### **Allegheny Woodrats**

Populations of Allegheny woodrats have been declining in the Northeast and the species has become extirpated in some states. This species has been considered for federal listing and populations are monitored by program personnel. Although no Allegheny woodrat surveys were conducted this year, observations of woodrats made while conducting other field work (i.e., bat surveys in caves) were recorded.

### **Miscellaneous Endangered Species Program Activities**

Numerous information requests from the public were answered, and popular articles were written on the state's threatened and endangered animal species. Program personnel reviewed WRS projects to assure compliance with the federal Endangered Species Act. Private landowners assisted with the management and conservation of rare species on their lands. Newsletter articles and other outreach projects were undertaken to promote awareness of the state's rare, threatened and endangered species and of WNS. Program biologists participated in regional and national workshops and biweekly conference calls addressing WNS. The last field season for the West Virginia land snail atlas project was completed in summer 2014; the draft publication was reviewed and edited this year, and a book should be available in fall 2015. The book will describe three new species discovered during the Atlas project.

## **TECHNICAL SUPPORT UNIT**

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### **Stream Restoration Program Physical Habitat Restoration Projects**

Personnel were active during the year coordinating and participating in efforts to assess and restore aquatic habitats in the state. Staff participated in the field reconnaissance of degraded streams, developed and submitted grant applications for inventory and research projects, and coordinated the implementation of such projects. WRS has continued the cooperative agreement with the Natural Resources Analysis Center at West Virginia University to assist in the development and implementation of the Stream Restoration Program. Program staff and partners completed a major fish passage restoration project on Lamothe Run of Upper Shavers Fork in 2013. Results of monitoring have been positive, indicating that brook trout are passing through the modified culvert. The Mill Creek stream restoration project in Kumbrabow State Forest, which started constructed in 2013, has had mixed results. Many structures are performing well, providing quality pool habitat and overhead cover.





Several structures did not survive high flow events during the winter and spring. Staff accessed the structures that did not function as anticipated this year. Staff repaired some of the structures this year and replicated additional structures that have proved successful. Staff continues to monitor this project. Streams were assessed as potential sites for additional future work. The cooperative agreement developed with the West Virginia Cooperative Fish and Wildlife Research Unit at WVU to coordinate and provide funding support for a long-term assessment of the effects of the aquatic habitat restoration project completed on the Shavers Fork main stem in 2012 is in the second year of monitoring efforts. Year one results indicate an increase in trout habitat units and Aquatic Organism Passage projects are successful. Determination of population level effects will require several more years of data analysis. Production of a video documentary about the Shavers Fork restoration efforts has been completed.

### **Acid Stream Restoration Program**

Management of the WRS's Acid Stream Restoration Project continued. This nationally recognized, publicly visible and highly popular project has restored, and now annually maintains, water quality and sport fisheries in more than 392 miles of 85 streams and five lakes impacted by acid precipitation. Restoration has been accomplished through annual, direct application of limestone sand to acid-impacted streams and through the operation of two self-feeding limestone drum stations. The total project budget is approximately \$350,000 annually. Seventy-five percent of project support accrues from the Sport Fish Restoration and Boating Trust Fund administered by the USFWS. The remaining 25 percent accrues from nonfederal sources including investment income from the West Virginia Wildlife Endowment Fund administered by the DNR and additional financial support from Trout Unlimited, Plum Creek Timber Company and Mead Westvaco. Without the Acid Stream Restoration Project, sport fisheries would be lost in these waters. Public fisheries in these restored waters sustain an additional 341,000 days of sport fishing and \$24 million of associated economic impact annually.

### **Planning Program**

The fish and wildlife planner coordinating with WVU staff continued work on the Wildlife Resources Section Capital Improvements Strategic Plan. Work was nearly completed on updates to the WRS's State Wildlife Action Plan this reporting period, which is a requirement to continue receiving federal funds under the State Wildlife Grant program administered by the USFWS. Assistance was provided in developing the DNR's annual budget narrative. Fiscal notes were prepared and submitted on legislation during the 2015 legislative session.

### **Coordination Program**

Continued action (i.e., compliance coordination with currently licensed hydropower projects, impact analysis, development of mitigation plans and document review associated with relicensing activities) was taken on each of the following proposed or licensed hydropower projects at reservoirs or river locks and dams: London/Marmet Dams, Winfield Dam on the Kanawha River, Millville Dam on the Shenandoah River, Lake Lynn Dam on the Cheat River, Hawks Nest Dam on the New River, Willow Island Dam on the Ohio River, Tygart Dam on the Tygart Valley River, Sutton Dam on the Elk River, Jennings Randolph Dam on the North Fork of the Potomac River, Robert C. Byrd, New Cumberland Dam, Pike Island Dam on the Ohio River, Hildebrand, Opekiska Dam, Morgantown Dam on the Monongahela River, Stonewall Jackson Dam on the West Fork River, Bluestone Dam, and Glen Ferris Dam on the New River. During this reporting period, 12 projects were in the licensing or relicensing process. Fourteen projects (15 developments) are currently licensed and/or are operating within West Virginia.

West Virginia continues to receive wind project inquiries. Two new inquiries were received during this reporting period (Cherry Ridge and Mountaineer 2) and some projects from the last have been dropped or stopped progressing toward implementation. West Virginia has received inquiries for approximately 14 separate wind projects located in seven counties with as many as 2,000 turbines.





The Coordination Program continued participation in the National Environmental Policy Act mitigation process for several major highway projects and numerous smaller highway, bridge and culvert improvement projects. Adoption of more environmentally sound design standards for culvert sizing and installation will significantly reduce the impacts of road crossings on West Virginia streams. Major highway projects that required significant time and effort included King Coal Highway, Coalfield Expressway, the New River Parkway, Corridor H (Kerens to Parsons), Thomas Pugh Buford Bridge and US Highway 220. Eighty-one bridges, 76 culverts and 65 other minor road projects (road widening, passing lane construction, flood damage etc.) also received routine coordination attention. Working with WVDOH, staff continues to negotiate new mitigation plans for Corridor H. Alignment modifications are now being considered to avoid impacts to the federally threatened small whorled pogonia. Mitigation options that have been studied by our staff in conjunction with DOH include Aquatic Organism Passage projects.

State Clean Water Act (CWA) certifications continue to be reviewed under the Memorandum of Understanding (MOU) with the West Virginia Department of Environmental Protection (WVDEP). Additional reviews were conducted and comments provided relative to Section 10 of the Rivers and Harbors Act. Considerable mitigation in the form of avoidance, reduction, re-creation, enhancement and compensation has been secured as a result of these efforts. Individual CWA, Section 404/10 permit actions were reviewed and coordinated. They include highway reviews, wetland and stream permit reviews, economic development projects, Natural Resources Conservation Service (NRCS) and West Virginia Conservation Agency (WVCA) project reviews. Staff responded to requests from the WVDOH, local officials, state officials and numerous watershed groups for information on permitting issues relating to wetland disturbance, mitigation obligations, permit compliance, Natural Stream Design and other issues.

Significant time continues to be spent working with the WVDEP and the COE evaluating and refining the science-based assessment protocol (West Virginia Stream and Wetland Valuation Metric) for stream and wetland disturbance activities. A CWA In-Lieu Fee Mitigation Program for the state has been officially certified and staff spends considerable time assisting the ILF coordinator. Staff serves on the Interagency Review Team (IRT). The IRT reviews and evaluates mitigation banking proposals and mitigation projects submitted by the In-Lieu Fee program. As of June 30, 2015, the ILF has received \$35,825,846 in payments. Staff expended considerable efforts this year coordinating a number of ILF projects including major stream and wetland restoration projects on Hillcrest WMA, Old Field Fork, Tug Fork WMA, Frozen Camp WMA, Mill Creek WMA, McClintic WMA, Lakin State Farm and Dunloup Creek. The ILF program has committed \$16,533,796 to projects as of this reporting period.

Staff attended field reviews and provided design input for the development of several newly proposed mitigation banks. Staff attends field reviews to verify yearly monitoring reports existing mitigation banks. Achievement of yearly success criteria is required for annual credit releases. There are 18 bank sites in various stages of development. There are seven banks currently authorized to sell mitigation credits.

The Regional Permit for Stream Restoration and Management by Individual Landowners (RLOP) was issued in June 1996 and, since issuance, approximately 3,065 applications have been reviewed and/or processed. Unfortunately, the USACE determined that the RLOP was redundant and these projects could be permitted using existing Nationwide Permits. Staff expended considerable time coordinating with WVCA, USACE, and WVDEP to formulate a MOU and standard operating procedures between the USACE, WVDEP, WVDNR and the WVCA. Final comments on the MOU were submitted. Currently there is not a final MOU between the agencies.

Staff worked with the NRCS and USFWS on three dam removals on the West Fork River. It is the goal to return approximately 25 miles of the river to a free-flowing state.



Staff coordinated with the WVCA on several small Natural Stream Restoration projects using principles of NSD to resolve significant bank stability issues on private lands. Projects were reviewed and authorized on Knapps Creek, South Fork South Branch, North Fork of the South Branch, Whitethorn Creek and Little Cacapon. These projects involved implementing minor modifications to channel dimensions and in-stream structures in place of traditional hard armor engineering (riprap). Coordination continues on the Lower Cove Run Dam site #16 Flood Control and Water Supply. NRCS has submitted a revised permit application for the project that has several significant discrepancies from the original permit application. Staff reviewed preliminary Stream and Wetland Valuation forms for the proposed dam rehabilitation project on Upper Deckers Creek.

Technical assistance relative to fish and wildlife continues to be provided to the WVDEP's mitigation development program and biologists continue to review surface mine permit applications.

We were successful in securing an EPA Wetland Development Grant for \$700,000 to develop a science-based mitigation tool similar to the stream tool in the SWVM. The tool will also be used to monitor our state wetlands. DNR is directing the majority of the grant to DEP to complete the project.

Staff serves on several inter-agency committees including the Inter-agency Review Team (mitigation banking, in-lieu fee), the Water Gaging Council, West Virginia Water Research Institute, State Association of Wetland Managers and the NRCS State Technical Committee for Farm Bill programs.

Staff is active in providing coordination with the Marcellus Shale Gas industry in an attempt to mitigate impacts to our charge resources. Staff reviewed various applications for oil and gas related activities, including well locations, pipeline activities, electrical substations and midstream plant construction. Technical support was provided to DEP Office of Oil and Gas and to Waste and Water concerning impacts to fish and wildlife associated with oil and gas production and transmission. Support was also provided to Warmwater Fish and Game Management Units for oil and gas activities on Lewis Wetzel WMA. Staff completed review and preparation of Enhancing Wildlife Habitat on Oil and Gas Infrastructure. Distribution of the final publication was to committee members composed of industry, state agencies, West Virginia University Extension Service and Non-Government Organizations (NGO). The publication was also distributed to DNR District Offices, USACE Huntington and Pittsburgh, WVDEP Offices of Waste and Water, Oil and Gas and AML.

Technical assistance continues with DEP concerning stream impacts from construction of transmission lines and midstream gas processing facilities and the associated stream restoration projects required as mitigation. Staff has provided assistance to WVDEP, USACE and EPA for review of Section 404 violations at numerous oil and gas construction sites and related wetland and stream mitigation and restoration activities. Assistance was also provided to industry related to development of BMPs for stream crossing activities. Staff provided continued support to the U.S. Fish and Wildlife Service in protecting their charge resources potentially impacted by the oil and gas industry.

Project personnel continue working with USFWS personnel to develop the Ohio River Islands National Wildlife Refuge Habitat Management and Hunt Plans. Work continues on the Canaan Valley Habitat Management Plan. Coordination continues with minor projects requiring NEPA review for the USFS - Monongahela National Forest. The DNR is partnering with the USFS and the Wildlife Management Institute to develop early successional stage habitat on the forest as part of the American Woodcock Initiative.

Staff offers assistance to other sections and participates in numerous game and fish management activities including, but not limited to, National Hunting and Fishing Days Celebration, fish stocking, CWD check stations, fish surveys and deer counts. Staff participates in various programs such as Randolph County Outdoor Education, Wirt County Wetland day, Master Naturalist, JAKES Days and 4-H. Staff informs participants of the success and importance of wetlands and the CWA.

### **Biometrics/Geographic Information System (GIS) Program**

Staff provided routine installation, maintenance and support of computer hardware, software and peripherals for the WRS, funded by traditional sources including grants and contracts (USFWS and USEPA).

Staff continued assisting with new and ongoing WRS projects and activities. Activities included performing data processing; project design and analysis consulting; conducting data analysis; preparing paper and electronic map products; technical training; computer maintenance; and support for WRS budgeting, personnel and inventory.

Annual routine projects supported included managing the WRS's work report system, producing game harvest and trout stocking summaries, summarizing spring gobbler survey results, summarizing responses from the grouse cooperator survey, summarizing bow hunter survey results, processing antlerless deer applications for eligibility, summarizing statewide hunter prospects and mast surveys, summarizing accomplishments for the Game Management Unit, and preparing federal aid vouchers and monthly summaries for all projects. Maintaining and managing hunter and boater databases and providing time and cost reporting services to the Law Enforcement Section were continued.

A web-based tool is maintained in cooperation with NRCS and USFWS to provide rare species data to assist District Conservationists in protecting these species as they install NRCS conservation practices.

GIS staff provided training and technical assistance to WRS staff on GIS and Global Positioning Systems (GPS) data acquisition and dataset development, GPS data management, GIS application use, cartography, large-format printing and spatial data analysis. Existing GPS collection, processing and organization procedures were further refined to help streamline the tracking of GPS data collection activities. These geospatial services were provided for WRS projects operating statewide to ensure the collection of well-documented and accurate locations of field survey data. GIS staff has deployed GIS capabilities in district offices and with cooperating agencies and provided ongoing staff instruction as requested.

GIS staff is maintaining and managing more than three terabytes of natural resource base mapping information ranging from statewide aerial photography, satellite imagery, topographic maps, soil surveys, geology, elevation models for visualization and watershed modeling, streams, wetlands, public fishing lakes, demographics, political boundaries, land use/land cover and other miscellaneous natural resource datasets. Use of these GIS datasets by agency staff continues to grow and become incorporated into the daily workflow and basic analysis of project data for management of state lands.

All of this natural resource GIS data is maintained in a central database server used to store and share data and project management information throughout the agency. This secure central database server is available to agency staff and cooperating agencies across the Internet enabling data processing, spatial analysis, and cartographic expertise at a central office to be available cost-effectively throughout the agency. Database management and application development progressed in a continually evolving GIS program.





GIS staff responds to requests for data from engineering firms, contractors, partners and other federal/state organizations as needed. Staff provides data as appropriate to support WRS projects, activities and interests.

Following are some additional highlights of the Biometrics/GIS Program:

#### **Game Management Plan Revisions**

Biometrics staff continued to provide assistance to Game Management staff with data development, spatial analysis, and cartography as part of a series of ongoing Game Management plans.

#### **Chronic Wasting Disease**

Data analysis and mapping services supported the ongoing CWD monitoring efforts.

#### **Wildlife Management Area Mapping**

GIS staff continued development of spatial databases for mapping WMA boundaries and facilities. These data are used for natural resource planning and producing maps for the public.

#### **White-Nose Syndrome**

Biometrics staff assisted Wildlife Diversity staff with the implementation of an expanded fourth year of a statewide bat surveys. Laptop computers fitted with ultrasonic acoustic receivers and GPS units were used by staff and volunteers to increase statewide acoustic route coverage. Acoustic bat call recordings are analyzed to help determine changes in bat populations and habitat use.

#### **Rare Species Distribution Models**

Work continued to expand the number of species and validate species distribution models to estimate the statewide distribution of 250 species and 25 habitats in the West Virginia Wildlife Conservation Action Plan.

#### **Recreational Resources Mapping**

Staff continues work to develop/enhance a web-tool to provide the public increased access to WRS facilities including WMAs, stream access, float trips, check stations, licensed agents, trout stocking information, physically challenged or Class Q opportunities, district office contact information, and links to online resources for license purchases and regulations. Although most of the information can be found at the WVDNR website, the Web-tool provides a geographic representation of opportunities/resources in a map interface, which is visually appealing, familiar, and will be scalable as use and demand grow.



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324 4th Avenue  
South Charleston, West Virginia 25303  
304-558-2754  
Fax: 304-558-2768  
[www.wvdnr.gov](http://www.wvdnr.gov)