

West Virginia
Natural Resources



DIVISION OF NATURAL RESOURCES ANNUAL REPORT 2013-2014



WEST VIRGINIA



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Jeffrey S. Bowers, Sugar Grove
Byron K. Chambers, Romney
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The West Virginia Division of Natural Resources Annual Report 2013-2014 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

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Earl Ray Tomblin
Governor

Frank Jezioro
Director

December 1, 2014

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, 2013, through June 30, 2014.

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.

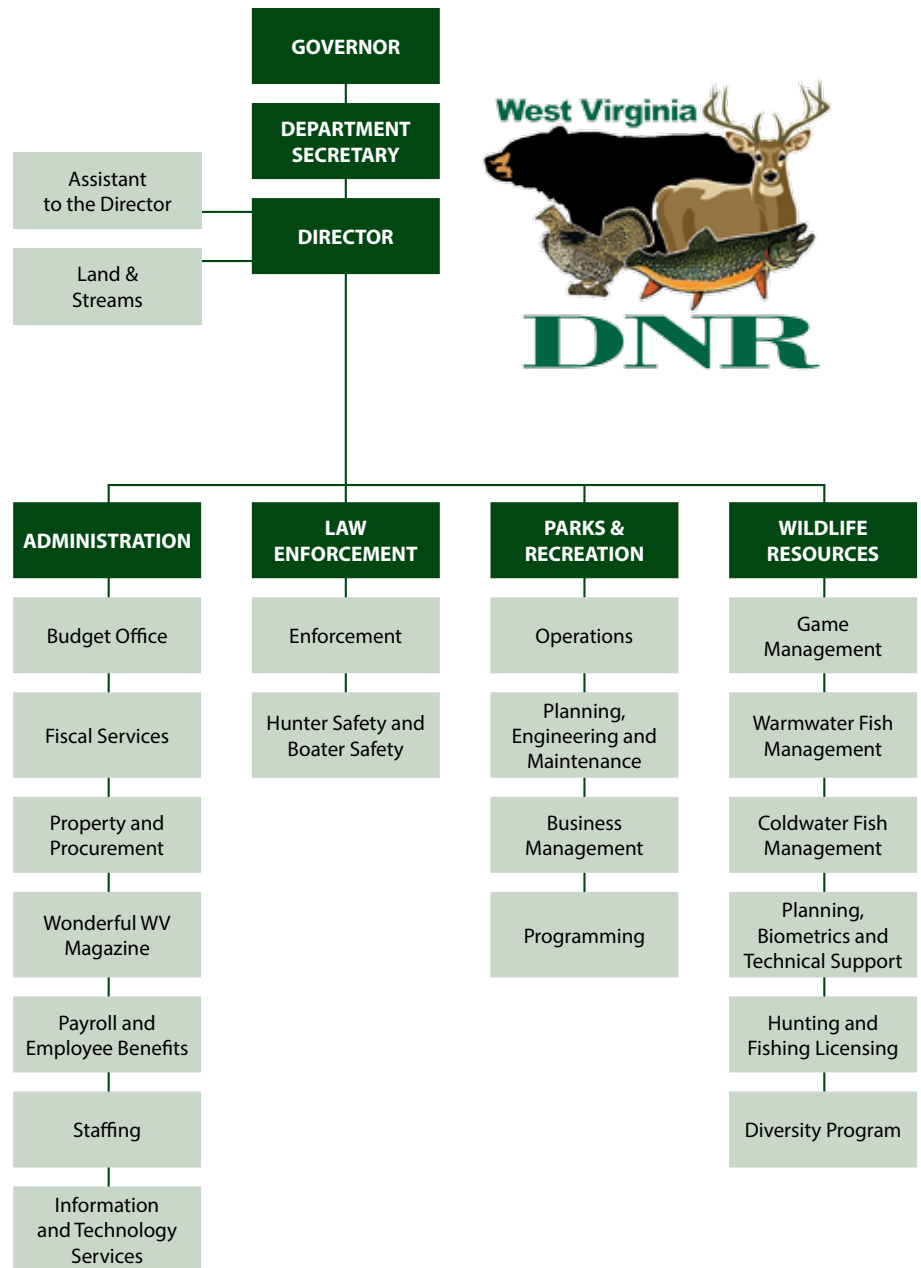
Sincerely,

A handwritten signature in blue ink that reads "Frank Jezioro".

Frank Jezioro
Director

FJ/jt

DNR ORGANIZATIONAL CHART





MISSION STATEMENT

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.

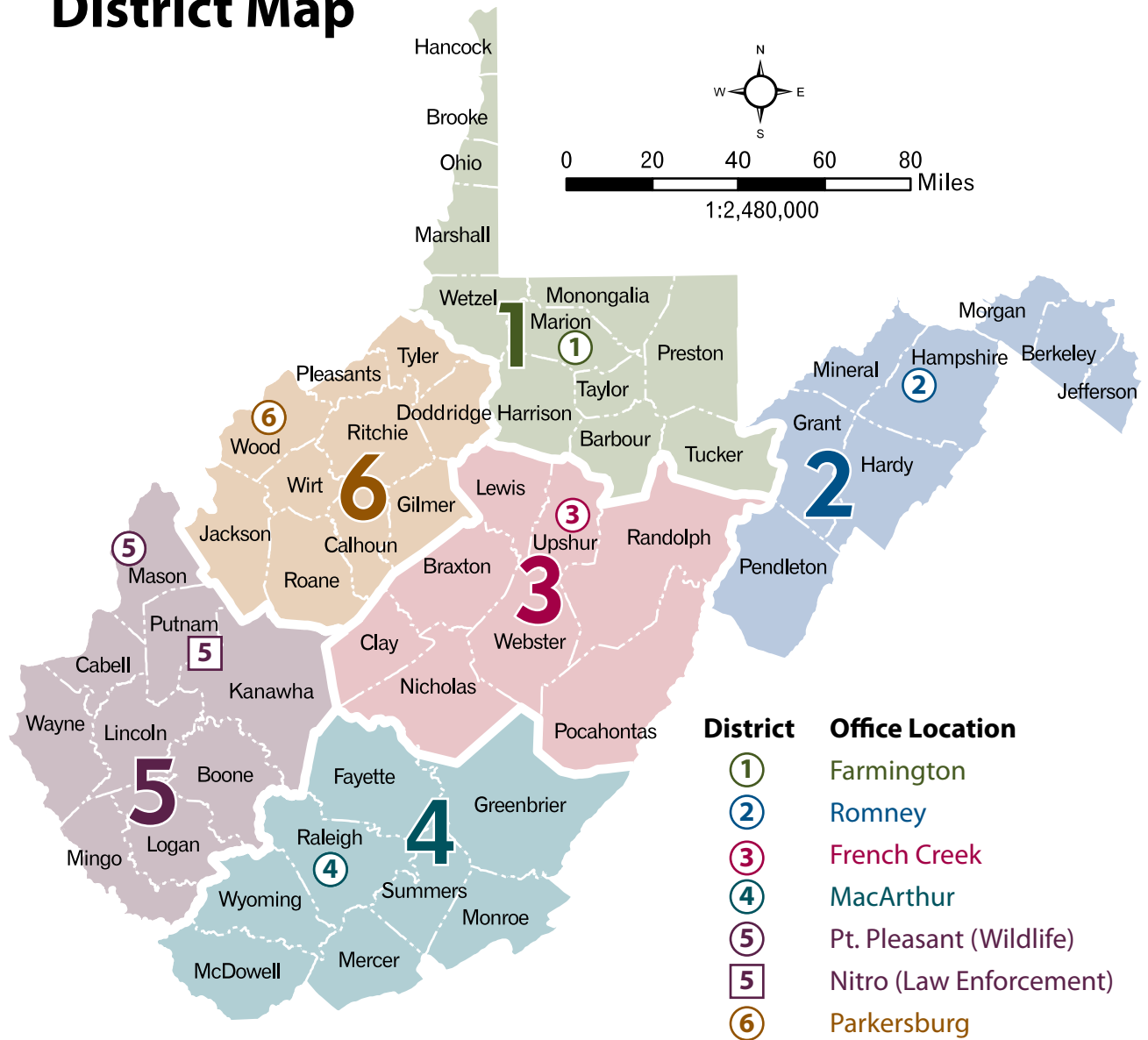
BOARDS AND COMMISSIONS ON WHICH THE DIRECTOR SERVES

- West Virginia Natural Resources Commission
- Wildlife Endowment Fund Board of Trustees
- Ohio River Management Fund Advisory Board
- West Virginia Public Land Corporation
- West Virginia Whitewater Commission
- West Virginia Tourism Commission
- West Virginia Outdoor Heritage Conservation Fund
- Hatfield-McCoy Regional Recreation Authority
- National Coal Heritage Area Authority

EEOC STATEMENT

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. Briery Mountain
3. Burches Run
4. Castleman's Run Lake
5. Cecil H. Underwood
6. Center Branch
7. Cross Creek
8. Dunkard Fork
9. Hillcrest
10. Lantz Farm and Nature Preserve
11. Lewis Wetzel
12. Little Indian Creek
13. Pedlar
14. Pleasant Creek
15. Pruntytown State Farm
16. Snake Hill
17. Teter Creek
18. Upper Deckers Creek

District 3

(304) 924-6211

30. Becky Creek
31. Big Ditch
32. Burnsville Lake
33. Elk River
34. Handley
35. Huttonsville
36. Slatyfork
37. Smoke Camp
38. Stonewall Jackson Lake
39. Stonewall Jackson Lake
40. Summersville Lake
41. Valley Bend
42. Wallback

District 5

(304) 675-0871

55. Amherst/Plymouth
56. Beech Fork Lake
57. Big Ugly
58. Chief Cornstalk
59. East Lynn Lake
60. Elk Creek
61. Green Bottom
62. Hilbert
63. Laurel Lake
64. McClintic
65. Mill Creek
66. Morris Creek
67. Upper Mud River

District 6

(304) 420-4550

68. Buffalo Run
69. Conaway Run Lake
70. Frozen Camp
71. Hughes River
72. O'Brien Lake
73. Ritchie Mines
74. Rollins Lake
75. Sand Hill
76. Stumptown
77. The Jug
78. Turkey Run
79. Woodrum Lake

National Forests

- I. Beaver Dam
- J. Blackwater
- K. Cheat
- L. Cove Creek
- M. Cranberry
- N. Little River
- O. Neola
- P. Otter Creek
- Q. Potomac
- R. Potts Creek
- S. Rimel
- T. Shenandoah
- U. Tea Creek
- V. Wardensville

District 4

(304) 256-6947

43. Anawalt Lake
44. Berwind Lake
45. Beury Mountain
46. Bluestone Lake
47. Horse Creek Lake
48. Meadow River
49. Moncove Lake
50. Panther
51. Plum Orchard Lake
52. R.D. Bailey Lake
53. Tate Lohr
54. Tug Fork

District 2

(304) 822-3551

19. Allegheny
20. Edwards Run
21. Fort Mill Ridge
22. Nathaniel Mountain
23. Shannondale Springs
24. Short Mountain
25. Sleepy Creek
26. South Branch
27. Thorn Creek
28. Warden Lake
29. Widmeyer

State Forests

(304) 558-2764

- A. Cabwaylingo
- B. Calvin Price
- C. Camp Creek
- D. Coopers Rock
- E. Greenbrier
- F. Kanawha
- G. Kumbrabow
- H. Seneca

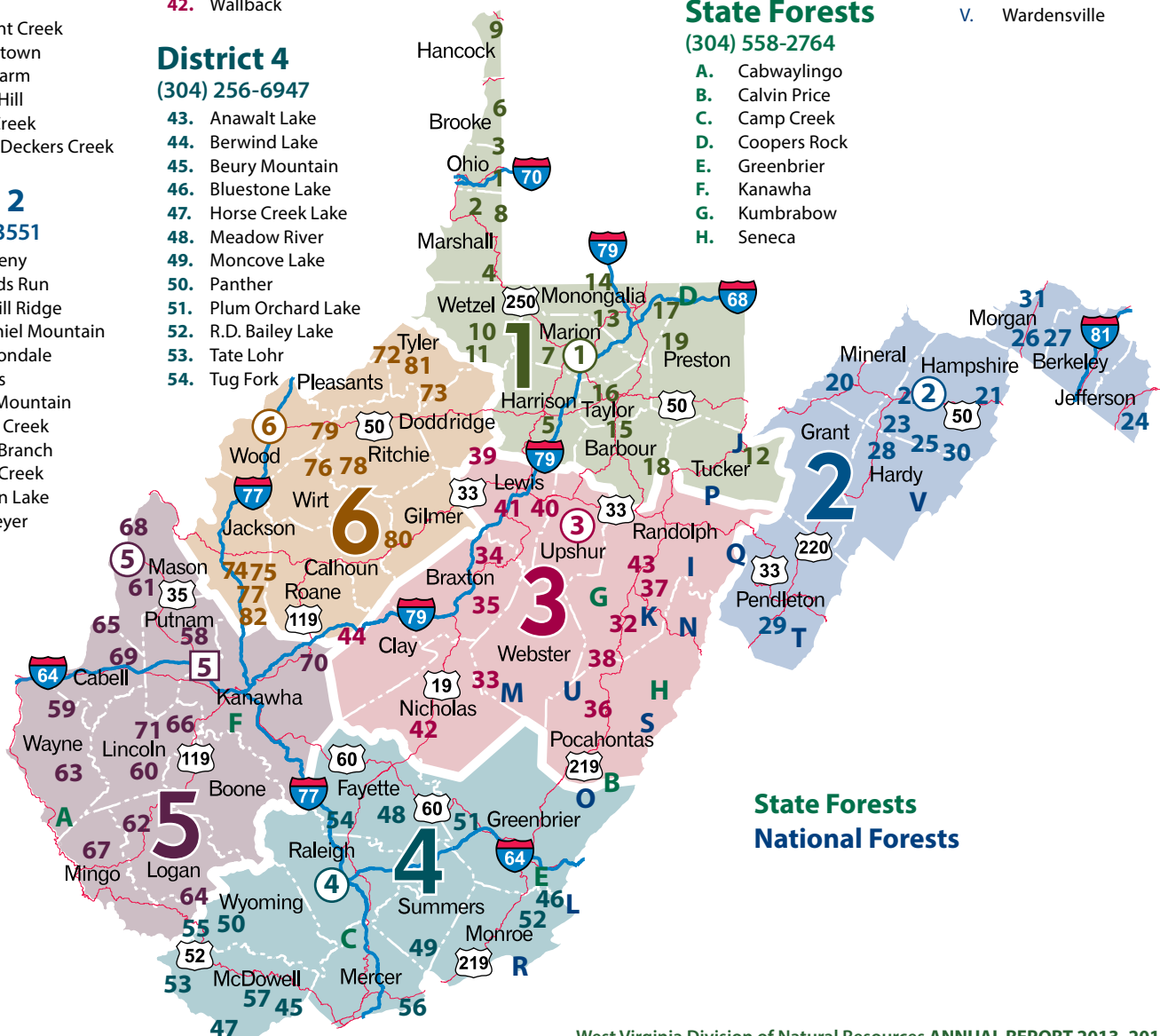


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Administration

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.

**Administration
Section**
Bryan Hoffman,
Executive Secretary

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.

WONDERFUL WEST VIRGINIA MAGAZINE

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 32,050 copies printed of each issue.

In FY 2014 the average number of copies mailed each month to paid individual subscribers was 29,035. In addition, some 2,356 copies were distributed each month to paid bulk subscribers such as government agencies, chambers of commerce, motels, real estate firms, newsstands in state parks, and other newsstand distributors.

STATEMENT OF DISBURSEMENTS

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, 2014. Itemization of summarized financial data contained in this report is public and on file.

Statement of Disbursements

ADMINISTRATION SECTION

EXECUTIVE/ADMINISTRATIVE

Personal Services	\$	313,361.61
Employee Benefits		79,603.98
Current Expenses		280,964.66
Repairs & Alterations		10,597.99
Equipment		7,390.98
Fund Transfer		2,000,000.00
TOTAL	\$	2,691,919.22

FISCAL SERVICES

Personal Services	\$	563,684.16
Employee Benefits		209,466.74
Current Expenses		595,340.27
Repairs & Alterations		25,633.08
PEIA Transfer		14,505.59
TOTAL	\$	1,408,629.84

STAFFING/PAYROLL

Personal Services	\$	233,872.41
Employee Benefits		77,377.90
Current Expenses		26,810.60
Repairs & Alterations		13,376.00
TOTAL	\$	351,436.91

GENERAL SERVICES

Personal Services	\$	333,309.00
Employee Benefits		121,263.34
Current Expenses		222,125.92
Repairs & Alterations		46,042.76
Equipment		14,512.10
Building Improvements		50.24
TOTAL	\$	737,303.36

WONDERFUL WEST VIRGINIA MAGAZINE

Personal Services	\$	35,076.00
Employee Benefits		15,511.99
Current Expenses		550,705.86
Repairs & Alterations		2,112.00
TOTAL	\$	603,405.85

General Revenue Appropriated	\$	2,286,825.87
Special Revenue Non-Appropriated		2,588,770.78
Special Revenue Appropriated		851,365.19
Federal Revenue Appropriated		65,733.34
TOTAL ADMINISTRATION	\$	5,792,695.18

LAW ENFORCEMENT SECTION

LAW ENFORCEMENT

Personal Services	\$	5,533,178.36
Employee Benefits		2,115,790.59
Current Expenses		1,793,927.05
Repairs & Alterations		358,665.50
Equipment		221,721.12
PEIA Transfer		17,659.93
Medical Service Payments		10,236.00
TOTAL	\$	10,051,178.55

General Revenue Appropriated	\$	2,892,754.20
Special Revenue Non-Appropriated		915,935.34
Special Revenue Appropriated		5,271,279.48
Federal Revenue Appropriated		971,209.53
TOTAL LAW ENFORCEMENT	\$	10,051,178.55

WILDLIFE RESOURCES SECTION

GAME MANAGEMENT

Personal Services	\$	2,591,955.45
Employee Benefits		973,902.77
Current Expenses		1,031,321.54
Repairs & Alterations		344,964.81
Equipment		254,196.80
Payment of Claims		268,106.52
PEIA Transfer		533.16
Building Improvements		10,942.32
Land Improvements		20,684.06
TOTAL	\$	5,496,607.43

CAPITAL IMPROVEMENTS

Personal Services	\$	208,013.30
Employee Benefits		48,950.28
Current Expenses		259,340.37
Repairs & Alterations		33,057.26
Payment of Claims		387.85
Capital Improvements/Land Purchases		1,428.86
Building Improvements		57,527.19
Land Improvements		121,194.42
Land Purchases		1,562,151.00
Consultant Pmts for Capital Asset Proj		48,094.80
TOTAL	\$	2,340,145.33

Statement of Disbursements

COLD WATER FISH MANAGEMENT

Personal Services	\$	1,127,645.86
Employee Benefits		475,388.37
Current Expenses		960,698.90
Repairs & Alterations		113,362.32
Equipment		78,141.82
Medical Service Payments		140.00
TOTAL	\$	2,755,377.27

WILDLIFE - ADMINISTRATION

Personal Services	\$	532,933.43
Employee Benefits		220,057.14
Current Expenses		1,298,107.36
Repairs & Alterations		36,448.62
Equipment		28,483.92
Land Improvements		1,836.00
TOTAL	\$	2,117,866.47

WARM WATER FISH MANAGEMENT

Personal Services	\$	1,109,345.35
Employee Benefits		403,557.66
Current Expenses		615,828.92
Repairs & Alterations		115,818.30
Equipment		45,179.72
Building Improvements		200.67
Medical Service Payments		73.85
Reclamation of State Owned Property		690.99
TOTAL	\$	2,290,695.46

TECHNICAL SUPPORT

Personal Services	\$	538,704.64
Employee Benefits		204,338.81
Current Expenses		302,905.53
Repairs & Alterations		26,122.98
TOTAL	\$	1,072,071.96

SPECIAL PROJECTS

Personal Services	\$	271,628.25
Employee Benefits		92,034.64
Current Expenses		323,651.60
Repairs & Alterations		16,988.29
Land Purchases		1,516,595.00
TOTAL	\$	2,220,897.78

WILDLIFE DIVERSITY

Personal Services	\$	756,547.71
Employee Benefits		294,778.16
Current Expenses		413,612.63
Repairs & Alterations		40,736.45
Equipment		31.36
Medical Service Payments		72.50
TOTAL	\$	1,505,778.81

HUNTING & FISHING LICENSE UNIT

Personal Services	\$	162,342.18
Employee Benefits		56,286.97
Current Expenses		216,434.39
Repairs & Alterations		8,624.00
TOTAL	\$	443,687.54

ELKINS OPERATIONS CENTER

Personal Services	\$	124,004.24
Employee Benefits		56,961.00
Current Expenses		141,640.01
Repairs & Alterations		43,803.45
Equipment		102,920.00
TOTAL	\$	469,328.70

WEST VIRGINIA WILDLIFE CENTER

Personal Services	\$	193,105.50
Employee Benefits		68,447.17
Current Expenses		72,715.03
Repairs & Alterations		46,135.34
Medical Service Payments		10.00
TOTAL	\$	380,413.04

General Revenue Appropriated	\$	197,271.06
Special Revenue Non-Appropriated		5,608,181.99
Special Revenue Appropriated		6,551,528.98
Federal Revenue Appropriated		8,735,887.76
TOTAL WILDLIFE RESOURCES	\$	21,092,869.79

PARKS & RECREATION SECTION

PARKS & RECREATION

Personal Services	\$ 17,391,047.65
Employee Benefits	5,980,619.56
Current Expenses	12,728,934.35
Repairs & Alterations	6,687,335.44
Equipment	161,269.34
Grants and Awards	12,591.42
PEIA Transfer	99,666.29
Building Improvements	8,987.71
Land Improvements	7,999.20
Consultant Pmts for Capital Asset Proj	1,106,037.34
Medical Service Payments	4,402.50
TOTAL	\$ 44,188,890.80

General Revenue Appropriated	\$ 11,070,727.36
Special Revenue Non-Appropriated	20,235,374.29
Special Revenue Appropriated	12,882,789.15
Federal Revenue Appropriated	0.00
TOTAL PARKS & RECREATION	\$ 44,188,890.80

SPECIAL PROGRAMS & SERVICES SECTION

OFFICE OF LAND & STREAMS

Personal Services	\$ 236,515.86
Employee Benefits	76,067.07
Current Expenses	112,925.35
Repairs & Alterations	11,536.94
Equipment	30,438.57
PEIA Transfer	1,336.45
Building Improvements	28,300.00
Land Purchases	160,000.00
TOTAL	\$ 657,120.24

Special Revenue Non-Appropriated	\$ 119,528.59
Special Revenue Appropriated	537,591.65
TOTAL SPECIAL PROGRAMS & SERVICES	\$ 657,120.24

Grand Total General Revenue Appropriated	\$ 16,447,578.49
Grand Total Special Revenue Non-Appropriated	29,467,790.99
Grand Total Special Revenue Appropriated	26,094,554.45
Grand Total Federal Revenue Appropriated	9,772,830.63

GRAND TOTAL DISBURSEMENTS \$ 81,782,754.56

Statement of Revenues/Disbursements

COMBINING STATEMENT OF REVENUES, DISBURSEMENTS AND CHANGES IN CASH BALANCES FISCAL YEAR 2013-2014

APPROPRIATED FUNDS

GENERAL FUND (0265)

Appropriated Fund - No Cash Balance

DISBURSEMENTS

Personal Services	(10,989,026.04)	
Employee Benefits	(4,062,822.94)	
Current Expense	(538,583.05)	
Repairs and Alterations	(19,697.14)	
Contractor Pmts for Capital Asset Proj	(165,860.49)	
PEIA Reserve Transfer	(94,504.27)	
WV OPEB Contribution	(577,084.56)	
TOTAL DISBURSEMENTS		(16,447,578.49)

SPECIAL REVENUE LICENSE FUND (3200)

Cash Balance July 1, 2013	1,953,318.25
Investment Balance July 1, 2013	4,490,562.87
Beginning Fund Balance	6,443,881.12

RECEIPTS

Animal Replacement Costs	37,976.62	
Hunting & Fishing Licenses and Stamps	12,309,507.02	
Insurance Payments	23,219.62	
Investment Earnings	9,476.30	
Miscellaneous Permits and License	8,745.50	
Miscellaneous Collections	5,734.00	
Surplus Property Sale	46,389.00	
Transfer from Wildlife Endowment Fund	2,000,000.00	
TOTAL RECEIPTS		14,441,048.06

DISBURSEMENTS

Personal Services	(5,053,406.05)	
Employee Benefits	(2,063,223.74)	
Current Expense	(3,024,523.49)	
Repairs and Alterations	(406,322.87)	
Equipment	(476,808.14)	
Medical Service Payments	(10,309.85)	
Building Improvements	(2,185.87)	
Bank Costs	(478.61)	
2014 Capital Improvements	(514,069.17)	
WV OPEB Contribution	(242,686.56)	
LESS TOTAL DISBURSEMENTS		(11,794,014.35)

Ending Fund Balance	9,090,914.83
Less - Investment Balance June 30, 2014	(6,460,795.95)
CASH BALANCE JUNE 30, 2014	2,630,118.88

Statement of Revenues/Disbursements

GAME, FISH AND AQUATIC LIFE FUND (3202)

Cash Balance July 1, 2013		33,562.46
Investment Balance July 1, 2013		640,785.74
Beginning Fund Balance		674,348.20
RECEIPTS		
Gifts and Bequests	10,000.00	
Investment Earnings	815.68	
PLUS TOTAL RECEIPTS		10,815.68
DISBURSEMENTS		
Current Expense	(47,616.46)	
LESS TOTAL DISBURSEMENTS		(47,616.46)
Ending Fund Balance		637,547.42
Less - Investment Balance June 30, 2014		(432,601.42)
CASH BALANCE JUNE 30, 2014		204,946.00

WILDLIFE DIVERSITY FUND (3203)

Cash Balance July 1, 2013		83,369.98
Investment Balance July 1, 2013		10,911.35
Beginning Fund Balance		94,281.33
RECEIPTS		
Investment Earnings	280.08	
Miscellaneous Collections	777.00	
Sale of Booklets	981.50	
Sale of Wildlife Calendars	95,339.08	
Sale of Wildlife License Plates	349,318.88	
Special Events	4,028.20	
PLUS TOTAL RECEIPTS		436,578.65
DISBURSEMENTS		
Personal Services	(77,292.00)	
Employee Benefits	(38,356.17)	
Current Expense	(58,392.84)	
Bank Costs	(1,080.87)	
WV OPEB Contribution	(4,224.00)	
LESS TOTAL DISBURSEMENTS		(179,345.88)
Ending Fund Balance		365,660.19
Less - Investment Balance June 30, 2014		(113,191.43)
CASH BALANCE JUNE 30, 2014		252,468.76

USE & DEVELOPMENT FUND - PUBLIC LAND CORPORATION (3205)

Cash Balance July 1, 2013 4,025,740.87

RECEIPTS

Channel Changes	2,000.00	
Docking Facilities	11,700.00	
Gas & Oil Leases	15,940.21	
Low Water Fords	19,900.00	
Low Water Level Bridges	154,100.00	
Permits	85,500.40	
Pipeline Permits	502,795.00	
Right of Way	41,000.00	
Sand/Gravel ATE Management	5,400.00	
Sand and Gravel Royalties	105,532.00	
Stream Restoration	8,900.00	
Structures	189,425.00	
Subterranean Cable Permit Renewal	14,345.00	
Water Intake Supply System	7,700.00	
PLUS TOTAL RECEIPTS		1,164,237.61

DISBURSEMENTS

Personal Services	(83,164.79)	
Employee Benefits	(26,584.53)	
Current Expense	(100,345.53)	
Repairs and Alterations	(854.05)	
Equipment	(29,509.60)	
PEIA Reserve Transfer	(818.05)	
Bank Costs	(1,010.25)	
WV OPEB Contribution	(2,234.89)	
Land Purchases	(160,000.00)	
LESS TOTAL DISBURSEMENTS		(404,521.69)

CASH BALANCE JUNE 30, 2014 4,785,456.79**WHITewater STUDY AND IMPROVEMENT FUND (3253)**

Cash Balance July 1, 2013 38,727.39

Investment Balance July 1, 2013 28,466.44

Beginning Fund Balance 67,193.83

RECEIPTS

Investment Earnings	83.27	
Study and Improvement Fees	50,111.95	
Whitewater Stocking Study Fee-Gauley River	7,616.35	
PLUS TOTAL RECEIPTS		57,811.57

DISBURSEMENTS

Personal Services	(38,443.40)	
Employee Benefits	(17,441.79)	
Current Expense	(6,492.96)	
PEIA Reserve Transfer	(356.01)	
WV OPEB Contribution	(2,112.00)	
LESS TOTAL DISBURSEMENTS		(64,846.16)

Statement of Revenues/Disbursements

Ending Fund Balance	60,159.24
Less - Investment Balance June 30, 2014	(22,549.71)
CASH BALANCE JUNE 30, 2014	37,609.53

DIVISION OF NATURAL RESOURCES LOTTERY FUND (3267)

Cash Balance July 1, 2013		4,207,007.98
RECEIPTS		
Lottery Transfers	9,795,744.00	
PLUS TOTAL RECEIPTS		9,795,744.00
DISBURSEMENTS		
Personal Services	(3,286,224.00)	
Employee Benefits	(1,594,466.07)	
Current Expense	(1,102,279.26)	
Repairs and Alterations	(2,539.45)	
Equipment	(31.36)	
PEIA Reserve Transfer	(11,968.80)	
Medical Service Payments	(72.50)	
Contractor Pmts for Capital Asset Proj	(3,320,719.00)	
Consultant Pmts for Capital Asset Proj	(911,616.96)	
WV OPEB Contribution	(227,640.11)	
LESS TOTAL DISBURSEMENTS		(10,457,557.51)
CASH BALANCE JUNE 30, 2014		3,545,194.47

STATE PARK IMPROVEMENT FUND (3277)

Cash Balance July 1, 2013		10,816,919.70
Beginning Fund Balance		
RECEIPTS		
Lottery Transfers	5,000,000.00	
PLUS TOTAL RECEIPTS		5,000,000.00
DISBURSEMENTS		
Current Expense	(486,342.21)	
Repairs and Alterations	(1,972,408.51)	
Equipment	(155,293.15)	
Contractor Pmts for Capital Asset Proj	(329,200.44)	
Consultant Pmts for Capital Asset Proj	(194,420.38)	
Building Improvements	(8,987.71)	
LESS TOTAL DISBURSEMENTS		(3,146,652.40)
CASH BALANCE JUNE 30, 2014		12,670,267.30

CONSOLIDATED FEDERAL FUND (8707)

Cash Balance July 1, 2013	5,967,088.79
Investment Balance July 1, 2013	5,152,581.23
Beginning Fund Balance	11,119,670.02

RECEIPTS**Law Enforcement**

Boating Safety	424,533.00	
Duplicate Boat Safety Cards	50.00	
Gifts and Bequests	28,500.00	
Hunter Safety Replacement Cards	18,280.00	
Hunter Safety	499,252.93	
Law Homeland Security	0.00	970,615.93

Wildlife Resources

Acid Water Studies	(12,917.47)	
Aquatic Restoration	14,269.33	
Archery Education in Schools	122,017.21	
Biometrics	147,841.78	
Boating Access Administration	329,078.26	
Cheat Canyon Land Purchase	1,516,595.00	
Commercial Navigable Rivers	30,026.87	
Comprehensive Wildlife Conservation Implementation	620,727.04	
District Wildlife Management	1,192,791.26	
Endangered Plants Grant	8,510.67	
Endangered Species	101,500.00	
EPA State Wetlands Development	202,202.00	
Fish & Wildlife Coordination	178,267.55	
Fish Restoration	34,097.60	
Interagency Coordination	282,046.05	
Investment Earnings	12,119.79	
Miscellaneous	4,080.00	
Reservoir Investigations	57,961.05	
Rivers and Streams Assessment	119,173.65	
Shavers Fork Project	100,000.00	
Shavers Fork Mitigation	132,244.00	
Small Impoundment Assessment	33,442.24	
Trout Hatchery Operations	988,834.66	
USDP AG NRCS Wildlife Hbt Inc	41,233.00	
Warmwater Fish Hatcheries Grant	242,507.88	
Wildlife Research	284,717.86	6,783,367.28

Parks

Cass Club House National Park Service	0.00	0.00
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PLUS TOTAL RECEIPTS

7,753,983.21

DISBURSEMENTS

Personal Services	(3,161,923.29)
Employee Benefits	(1,282,137.55)
Current Expense	(3,409,974.76)
Repairs and Alterations	(85,501.37)
Equipment	(163,071.38)

Statement of Revenues/Disbursements

Land Improvements	(557.80)	
Land Purchases	(1,516,595.00)	
WV OPEB Contribution	(153,069.48)	
LESS TOTAL DISBURSEMENTS		(9,772,830.63)
Ending Fund Balance		9,100,822.60
Less - Investment Balance June 30, 2014		(3,366,701.02)
CASH BALANCE JUNE 30, 2014		5,734,121.58

NON-APPROPRIATED FUNDS

LAW ENFORCEMENT PROGRAM FUND (3204)

Cash Balance July 1, 2013		105,970.40
Investment Balance July 1, 2013		3,012,310.91
Beginning Fund Balance		3,118,281.31
RECEIPTS		
Captive Cervid Facility License	4,500.00	
Investment Earnings	4,031.81	
Miscellaneous Collections	805.00	
Miscellaneous Permits	4,102.50	
Motorboat Licenses	741,828.25	
Tipping Fees	641,586.99	
Transfers	2,892.50	
Whitewater Rafting Licenses	32,250.00	
PLUS TOTAL RECEIPTS		1,431,997.05
DISBURSEMENTS		
Personal Services	(319,379.94)	
Employee Benefits	(139,243.01)	
Current Expense	9,597.11	
Repairs and Alterations	(34.65)	
WV OPEB Contribution	(19,008.00)	
LESS TOTAL DISBURSEMENTS		(468,068.49)
Ending Fund Balance		4,082,209.87
Less - Investment Balance June 30, 2014		(2,962,342.72)
CASH BALANCE JUNE 30, 2014		1,119,867.15

LAW ENFORCEMENT CONTRACTS (3208)

Cash Balance July 1, 2013		11,441.13
RECEIPTS		
Hinton Boat Race Patrol	0.00	
PLUS TOTAL RECEIPTS		0.00
DISBURSEMENTS		
Personal Services	0.00	
LESS TOTAL DISBURSEMENTS		0.00
CASH BALANCE JUNE 30, 2014		11,441.13

WILDLIFE ENDOWMENT FUND (3224)

Cash Balance July 1, 2013		1,610.00
Investment Balance July 1, 2013		46,767,734.16
Beginning Fund Balance		46,769,344.16
RECEIPTS		
Investment Earnings	6,219,628.59	
Lifetime Hunting & Fishing License	645,679.00	
PLUS TOTAL RECEIPTS		6,865,307.59
DISBURSEMENTS		
Fund Transfer	(2,000,000.00)	
LESS TOTAL DISBURSEMENTS		(2,000,000.00)
Ending Fund Balance		51,634,651.75
Less - Investment Balance June 30, 2014		(51,629,246.75)
CASH BALANCE JUNE 30, 2014		5,405.00

WILDLIFE RESOURCES-RECREATION FUND (3227)

Cash Balance July 1, 2013		476,467.37
Investment Balance July 1, 2013		8,797,839.62
Beginning Fund Balance		9,274,306.99
RECEIPTS		
Acid Impacted Stream Studies	11,627.53	
Allegheny Power	96,101.50	
Cabin Rentals	883.40	
Campsite Rentals	19,510.75	
Captive Cervid Facility License	4,500.00	
Coal Royalties	1,276,415.79	
Donation for Stream Treatment with Limestone	22,992.27	
Entrance Fees	54,648.67	
Fish Promotion and Research	111,348.79	
Gas Royalties	191,780.54	
Gift Shop Sales	6,287.45	
Gifts & Bequests	29,534.23	
Go-Wild Hunting & Fishing License Issuance Fee	214,622.50	
Habitat Land Inquiries	16,900.00	
Hunters Helping the Hungry	21,592.00	
Information Retrieval	37,500.00	
Investment Earnings	12,052.75	
In-Lieu Fees	25,800.00	
Leases	16,200.00	
Miscellaneous Collections	35,079.80	
Mitigation Wildlife	40,182.00	
Oil Royalties	23,727.18	
Picnic Shelter Fees	1,353.82	
Real Estate License Fees	37,884.95	
Residence Rentals	500.00	
Scientific Collection Permit	35,850.00	
Shavers Fork Mitigation/Tygart Valley Cons District	280,000.00	
Timber Sales	430,935.01	

Statement of Revenues/Disbursements

Toyota Donation for National Hunting & Fishing Day	17,500.00	
Transfers In	329,889.32	
Trophy Fish Citations	3,250.00	
Wildlife Cooperative Agreements	39,000.00	
Wildlife Special Events	33,256.94	
PLUS TOTAL RECEIPTS		3,478,707.19
DISBURSEMENTS		
Personal Services	(638,834.39)	
Employee Benefits	(200,696.14)	
Current Expense	(645,088.61)	
Repairs and Alterations	(82,157.81)	
Equipment	(99,671.94)	
Bank Costs	(125,377.47)	
Land Improvements	(32,253.87)	
Building Improvements	(10,635.97)	
WV OPEB Contribution	(25,097.60)	
LESS TOTAL DISBURSEMENTS		(1,859,813.80)
Ending Fund Balance		10,893,200.38
Less - Investment Balance June 30, 2014		(9,281,892.37)
CASH BALANCE JUNE 30, 2014		1,611,308.01

BEAR DAMAGE FUND (3228)

Cash Balance July 1, 2013		8,318.14
Investment Balance July 1, 2013		162,730.07
Beginning Fund Balance		171,048.21
RECEIPTS		
Bear Damage Stamps	286,746.00	
Investment Earnings	194.78	
PLUS TOTAL RECEIPTS		286,940.78
DISBURSEMENTS		
Current Expense	(17,116.27)	
Payment of Claims	(268,494.37)	
LESS TOTAL DISBURSEMENTS		(285,610.64)
Ending Fund Balance		172,378.35
Less - Investment Balance June 30, 2014		(45,924.85)
CASH BALANCE JUNE 30, 2014		126,453.50

WILDLIFE RESOURCES CONTRACTS FUND (3229)

Cash Balance July 1, 2013		152,980.20
Investment Balance July 1, 2013		686,803.04
Beginning Fund Balance		839,783.24
RECEIPTS		
Eramet Project - Ohio River	25,224.00	
Grant Award	10,316.00	
Investment Earnings	1,027.55	
PLUS TOTAL RECEIPTS		36,567.55

DISBURSEMENTS

Current Expense	0.00	
LESS TOTAL DISBURSEMENTS		0.00
Ending Fund Balance		876,350.79
Less - Investment Balance June 30, 2014		(669,830.59)
CASH BALANCE JUNE 30, 2014		206,520.20

MIGRATORY WATERFOWL STAMP FUND (3231)

Cash Balance July 1, 2013		2,643.83
Investment Balance July 1, 2013		66,246.39
Beginning Fund Balance		68,890.22
RECEIPTS		
Investment Earnings	79.33	
PLUS TOTAL RECEIPTS		79.33
DISBURSEMENTS		
Current Expense	(16,058.73)	
LESS TOTAL DISBURSEMENTS		(16,058.73)
Ending Fund Balance		52,910.82
Less - Investment Balance June 30, 2014		(39,325.72)
CASH BALANCE JUNE 30, 2014		13,585.10

CONSERVATION STAMP FUND (3232)

Cash Balance July 1, 2013		171,339.97
Investment Balance July 1, 2013		2,467,143.33
Beginning Fund Balance		2,638,483.30
RECEIPTS		
Conservation Stamp Sales	1,518,227.00	
Investment Earnings	3,004.49	
Transfers In	171,700.00	
PLUS TOTAL RECEIPTS		1,692,931.49
DISBURSEMENTS		
Personal Services	(107,920.80)	
Employee Benefits	(12,595.64)	
Current Expense	(197,662.05)	
Repairs and Alterations	(683.16)	
Land Purchases	(1,562,151.00)	
LESS TOTAL DISBURSEMENTS		(1,881,012.65)
Ending Fund Balance		2,450,402.14
Less - Investment Balance June 30, 2014		(1,258,147.82)
CASH BALANCE JUNE 30, 2014		1,192,254.32

Statement of Revenues/Disbursements

TROUT STAMP FUND (3233)

Cash Balance July 1, 2013		128,760.67
Investment Balance July 1, 2013		2,058,947.71
Beginning Fund Balance		2,187,708.38
RECEIPTS		
Investment Earnings	2,063.64	
Trout Stamp Sales	1,298,796.00	
PLUS TOTAL RECEIPTS		1,300,859.64
DISBURSEMENTS		
Personal Services	(1,042,356.86)	
Employee Benefits	(457,357.31)	
Current Expense	(500.00)	
WV OPEB Contribution	(65,472.00)	
LESS TOTAL DISBURSEMENTS		(1,565,686.17)
Ending Fund Balance		1,922,881.85
Less - Investment Balance June 30, 2014		(1,076,011.35)
CASH BALANCE JUNE 30, 2014		846,870.50

GIFTS, GRANTS & BEQUESTS (3237)

Cash Balance July 1, 2013		53,872.74
RECEIPTS		
Special Events	43,370.98	
PLUS TOTAL RECEIPTS		43,370.98
DISBURSEMENTS		
Current Expense	(45,839.99)	
LESS TOTAL DISBURSEMENTS		(45,839.99)
CASH BALANCE JUNE 30, 2014		51,403.73

LAND MINERALS AND SPECIAL PROJECTS (3239)

Cash Balance July 1, 2013		178,154.91
RECEIPTS		
Land Leases	20,201.12	
Miscellaneous Collections	148.00	
Real Estate Taxes	4,721.43	
Right-of-Way	27,428.50	
Royalties	100,000.00	
Transfers	200.00	
PLUS TOTAL RECEIPTS		152,699.05
DISBURSEMENTS		
Personal Services	(54,844.07)	
Employee Benefits	(19,143.58)	
Current Expense	(3,375.00)	
Equipment	(12,995.00)	
WV OPEB Contribution	(4,224.00)	
Remittance of Taxes	(9,123.54)	
PEIA Reserve Transfer	(518.40)	
Building Improvements	(28,300.00)	
LESS TOTAL DISBURSEMENTS		(132,523.59)
CASH BALANCE JUNE 30, 2014		198,330.37

PAYROLL CLEARING ACCOUNT (3245)

Cash Balance July 1, 2013		3,500.02
RECEIPTS		
Miscellaneous Collections	0.00	
PLUS TOTAL RECEIPTS		0.00
DISBURSEMENTS		
Employee Benefits	275.08	
LESS TOTAL DISBURSEMENTS		275.08
CASH BALANCE JUNE 30, 2014		3,775.10

LAW ENFORCEMENT AND SPORTS EDUCATION STAMPS (3247)

Cash Balance July 1, 2013		37,465.47
Investment Balance July 1, 2013		610,903.67
Beginning Fund Balance		648,369.14
RECEIPTS		
Law Enforcement / Sports Ed. Stamps	392,421.00	
Investment Earnings	731.82	
PLUS TOTAL RECEIPTS		393,152.82
DISBURSEMENTS		
Personal Services	(318,155.76)	
Employee Benefits	(116,838.49)	
WV OPEB Contribution	(12,672.00)	
LESS TOTAL DISBURSEMENTS		(447,666.25)
Ending Fund Balance		593,855.71
Less - Investment Balance June 30, 2014		(401,635.49)
CASH BALANCE JUNE 30, 2014		192,220.22

MAGAZINE SALES & SUBSCRIPTIONS (3248)

Cash Balance July 1, 2013		15,222.63
Investment Balance July 1, 2013		420,754.32
Beginning Fund Balance		435,976.95
RECEIPTS		
Investment Earnings	547.87	
Magazine Sponsorship	35,080.00	
Magazine Bookshelf Sales	6,286.21	
Magazine Sales	35,670.31	
Magazine Subscriptions	469,674.42	
PLUS TOTAL RECEIPTS		547,258.81
DISBURSEMENTS		
Current Expense	(537,909.97)	
Bank Costs	(2,252.37)	
LESS TOTAL DISBURSEMENTS		(540,162.34)
Ending Fund Balance		443,073.42
Less - Investment Balance June 30, 2014		(330,302.19)
CASH BALANCE JUNE 30, 2014		112,771.23

Statement of Revenues/Disbursements

CLEARING ACCOUNT-EQUIPMENT (3251)

Cash Balance July 1, 2013		59,020.94
RECEIPTS		
Surplus Property Sale	15,344.00	
PLUS TOTAL RECEIPTS		15,344.00
DISBURSEMENTS		
Employee Benefits	14,445.00	
Current Expense	129,602.72	
Repairs and Alterations	(3,094.00)	
LESS TOTAL DISBURSEMENTS		140,953.72
CASH BALANCE JUNE 30, 2014		215,318.66

CLASS A-1 SMALL ARMS HUNTING LICENSE (3259)

Cash Balance July 1, 2013		9,856.82
Investment Balance July 1, 2013		517,612.02
Beginning Fund Balance		527,468.84
RECEIPTS		
Class A-1 Small Arms Hunting License	79,286.00	
Lifetime Small Arms Hunting License	4,650.00	
Investment Earnings	679.48	
PLUS TOTAL RECEIPTS		84,615.48
DISBURSEMENTS		
Employee Benefits	0.00	
LESS TOTAL DISBURSEMENTS		0.00
Ending Fund Balance		612,084.32
Less - Investment Balance June 30, 2014		(599,291.50)
CASH BALANCE JUNE 30, 2014		12,792.82

PARKS IMPROVEMENT TO FACILITIES (3260)

Cash Balance July 1, 2013		0.00
RECEIPTS		
Interagency Federal Payments	0.00	
PLUS TOTAL RECEIPTS		0.00
DISBURSEMENTS		
Current Expense	0.00	
Repairs and Alterations	0.00	
LESS TOTAL DISBURSEMENTS		0.00
CASH BALANCE JUNE 30, 2014		0.00

WATTERS SMITH MEMORIAL STATE PARK (3261)

Cash Balance July 1, 2013		4.49
Investment Balance July 1, 2013		86,663.14
Beginning Fund Balance		86,667.63
RECEIPTS		
Investment Earnings	106.98	
PLUS TOTAL RECEIPTS		106.98
DISBURSEMENTS		
Equipment	0.00	
LESS TOTAL DISBURSEMENTS		0.00
Ending Fund Balance		86,774.61
Less - Investment Balance June 30, 2014		(86,770.12)
CASH BALANCE JUNE 30, 2014		4.49

DECOY ANIMALS ASSESSMENT FEE (3264)

Cash Balance July 1, 2013		63.06
Investment Balance July 1, 2013		6,415.32
Beginning Fund Balance		6,478.38
RECEIPTS		
Decoy Animal Assessment Fee	1,976.30	
Investment Earnings	7.59	
PLUS TOTAL RECEIPTS		1,983.89
DISBURSEMENTS		
Current Expense	(200.60)	
LESS TOTAL DISBURSEMENTS		(200.60)
Ending Fund Balance		8,261.67
Less - Investment Balance June 30, 2014		(6,422.91)
CASH BALANCE JUNE 30, 2014		1,838.76

STATE PARK OPERATING FUND (3265)

Cash Balance July 1, 2013		983,452.21
Investment Balance July 1, 2013		953,583.30
Beginning Fund Balance		1,937,035.51
RECEIPTS		
Arts and Crafts	12,892.20	
Bath / Massages	297,062.40	
Bicycle Rental	2,707.76	
Boat Charters	13,304.72	
Boat Rental	65,320.38	
Cabin Advance Reservation	4,086,511.53	
Cabin Rentals	842,368.40	
Campsite Advance Reservation	555,294.19	
Campsite Rentals	1,289,419.73	
Cass Advance Fares	268,596.73	
Coin Laundry Machines	8,645.81	
Consumers Sales Tax	34,054.84	
Cot & Crib Rental	24,172.58	
Dinner Train Advance	11,887.61	

Statement of Revenues/Disbursements

Disc Golf	7,860.15	
Driving Range	19,282.82	
Entrance Fees	266,700.81	
Equipment Rental	7,925.04	
Facility Use Rental	113,533.82	
Firewood Sales	125,776.59	
Food & Snacks	205,044.66	
Games	2,501.39	
Gas Royalties	11,737.21	
Gift Cards	52,463.71	
Gift Shop Sales	1,747,854.12	
Greens Fees	669,940.21	
Group Camps	41,756.42	
Hotel Occupancy Tax	564,301.87	
Investment Earnings	1,535.34	
Lodge Advance Reservation	2,836,103.04	
Lodge Rooms	2,611,247.03	
Lottery Collections - Net	9,415.00	
Magazine Sales	201.41	
Miniature Golf	21,696.49	
Miscellaneous Collections	(48,868.83)	
Miscellaneous Non-Taxable	307,233.27	
Miscellaneous Taxable	90,743.56	
Picnic Shelter Fees	209,311.44	
Pro Shop	142,444.66	
Railfan Weekend Tickets	58,206.00	
Railroad Charters	35,458.63	
Railroad Fares	550,549.14	
Residence Rentals	15,123.00	
Restaurants	1,277,788.64	
Roman Bath	111,925.91	
Shooting Ranges	22,433.50	
Sled Rental	26,779.95	
Special Events	32,060.15	
Swimming Fees	307,015.27	
Tram	144,089.34	
Vending Machines	42,249.02	20,153,658.66
RECEIPTS - CONCESSIONS		
Boat Dock Concession	33,425.11	
Coin Machine Concession	11,967.83	
Food and Snacks Concession	12,078.61	
Golf Carts	253,491.34	
Marina	13,379.01	
Miscellaneous Concession	123,016.04	
Restaurant Concession	42,294.68	
Riding Stable	17,064.65	506,717.27
PLUS TOTAL RECEIPTS		20,660,375.93

DISBURSEMENTS

Personal Services	(6,913,388.07)	
Employee Benefits	(1,297,519.12)	
Current Expense	(11,014,287.26)	
Repairs and Alterations	(10,890.82)	
Equipment	(3,590.95)	
Remittance Of Taxes	(549,006.15)	
Grants and Awards	(12,591.42)	
Bank Costs	(295,293.18)	
PEIA Reserve Transfer	(25,535.89)	
Land Improvements	(7,999.20)	
Medical Service Pmts	(4,402.50)	
WV OPEB Contribution	(79,780.80)	
LESS TOTAL DISBURSEMENTS		(20,214,285.36)
Ending Fund Balance		2,383,126.08
Less - Investment Balance June 30, 2014		(505,118.64)
CASH BALANCE JUNE 30, 2014		1,878,007.44

CANAAN MAINTENANCE FUND (3274)

Cash Balance July 1, 2013		18,597.86
RECEIPTS		
Maintenance Transfer from Operating Fund	0.00	
PLUS TOTAL RECEIPTS		0.00
DISBURSEMENTS		
Current Expense	0.00	
LESS TOTAL DISBURSEMENTS		0.00
CASH BALANCE JUNE 30, 2014		18,597.86

COYOTE MANAGEMENT FUND (3292)

Cash Balance July 1, 2013		132.18
Investment Balance July 1, 2013		2,605.35
Beginning Fund Balance		2,737.53
RECEIPTS		
Coyote Management Donations	1,846.00	
Investment Earnings	3.76	
PLUS TOTAL RECEIPTS		1,849.76
DISBURSEMENTS		
Current Expense	0.00	
LESS TOTAL DISBURSEMENTS		0.00
Ending Fund Balance		4,587.29
Less - Investment Balance June 30, 2014		(3,909.11)
CASH BALANCE JUNE 30, 2014		678.18

ALL FLOOD DISASTER FUNDS (3280,3281,3282,3284,3293,3294,3295,3296)

Fund 3280 (MAY '02 FLOOD DISASTER) Cash Balance July 1, 2013	49,740.77
Fund 3281 (JUN '03 FLOOD DISASTER) Cash Balance July 1, 2013	4,515.88
Fund 3282 (NOV '03 FLOOD DISASTER) Cash Balance July 1, 2013	42,620.75
Fund 3284 (MAY '04 FLOOD DISASTER) Cash Balance July 1, 2013	3,212.22
Fund 3293 (JUN '08 FLOOD DISASTER) Cash Balance July 1, 2013	7,209.38
Fund 3295 (MAR '10 FLOOD DISASTER) Cash Balance July 1, 2013	156,695.43
Fund 3296 (DEC '09 FLOOD DISASTER) Cash Balance July 1, 2013	3,240.00
Fund 3297 (FEB_MAR '12 FLOOD DISASTER) Cash Balance July 1, 2013	154,908.96
Fund 3299 (MAR '12 FLOOD DISASTER) Cash Balance July 1, 2013	127,810.05

RECEIPTS

Fund 3015 Transfers In	277,395.23	
Fund 3295 Transfers In	1,532.63	
Fund 3295 Re-characterization	(71,470.67)	
Fund 3297 Re-characterization	(134,088.52)	
Fund 3297 Transfers In	111,224.64	
Fund 3298 Transfers In	3,729.34	
Fund 3299 Transfers In	98,441.09	
PLUS TOTAL RECEIPTS		286,763.74

DISBURSEMENTS

Fund 3280 Contractor Pmts for Capital Asset Proj	(49,740.77)	
Fund 3281 Contractor Pmts for Capital Asset Proj	(4,515.88)	
Fund 3282 Current Expense	(15.00)	
Fund 3282 Building Purchase or Construction	(2,385.24)	
Fund 3282 Contractor Pmts for Capital Asset Proj	(9,391.33)	
Fund 3295 Current Expense	(3,679.67)	
Fund 3295 Repairs and Alterations	(5,611.23)	
Fund 3295 Contractor Pmts for Capital Asset Proj	(76,752.06)	
LESS TOTAL DISBURSEMENTS		(152,091.18)

CASH BALANCE JUNE 30, 2014	684,626.00
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RECAPITULATION OF FUNDS

	Revenue	Disbursements	Investments
General Fund	0.00	(16,447,578.49)	0.00
Consolidated Federal Funds	7,753,983.21	(9,772,830.63)	3,366,701.02
Appropriated Special Revenue Funds	30,920,381.66	(26,094,554.45)	7,029,138.51
Non-Appropriated Special Revenue Funds	37,280,912.06	(29,467,790.99)	68,896,172.13
TOTAL ALL FUNDS	75,955,276.93	(81,782,754.56)	79,292,011.66

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

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 Section 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

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 279 right-of-entry letters were granted to governmental agencies, companies, and individuals to conduct construction activities in the State's rivers, creeks, and streams; 838 right-of-way licenses were granted for pipelines, underground or underwater cables, and overhead power and telephone lines crossing the State's waterways; and 361 large stream structure agreements were granted for bridges and culverts.

OTHER FUNCTIONS

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 375,628 acres, for a total of 524,091 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 369 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
Big Chimney Public Access Site Slack Group, LLC	1.50
Blue Creek Public Access Site Philp & Faye Shafer	3.50
Bluestone Wildlife Management Area Walter H. Taylor	112.00
Camp Creek State Forest Camp Creek Outfitters, LLC	95.00
Cheat River Canyon Wildlife Management Area The Nature Conservancy	950.00
Fair Fax Pond – Rehe Wildlife Management Area The Estate of Harold Rehe Donna J. Rehe	338.00 300.00
Lewis Wetzel Wildlife Management Area Benjamin J. Jarvis	59.00
Meadow River Wetland Wildlife Management Area Thomas A. Vance	74.00
School House Cave Wildlife Management Area Linda K. Sponaugle & Donna J. Smith	0.35
Thorn Creek Wildlife Management Area Rosa L. Tiehenor	57.00
Wallback Wildlife Management Area Dorothy Rush	144.00
Wells Lock & Dam Public Access Site Wayne Wright	8.00

LAND LICENSED OR LEASED TO DNR

AREA	ACREAGE
R.D. Bailey Wildlife Management Area Heartwood Forestland Fund	30.00*
Bullskin Run Streambank Protection Area Avon Wood Inc.	1.08*
Cacapon Lake Bridge Public Access Site Division of Highways	1.00*
Cheat River Canyon Wildlife Management Area David Hough	2.00
Duck Bridge Public Access Site Division of Highways	0.50*
Fairmont Public Access Site Marion County Development Authority	0.50
French Creek Embayment Public Access Site Hal C. Williamson Riverview Rental, LLC	0.584* 1.00*
Greenbottom Wildlife Management Area U.S. Corps of Engineers	832.60*
Hanging Rock Public Access Site Charles R. Herriott	1.00*
Hedgesville Bridge Public Access Site Division of Highways	1.00*
Hughes River Wildlife Management Area Heartwood Forestland Fund IV, Limited Partnership	10,000.00*
Huntington Guyandotte Public Access Site Greater Huntington Park & Recreation District	0.50
Ivydale Public Access Site Charlene M. Boggs	0.50
Lamberts Landing Public Access Site Katherine Clayton	0.50
Limestone Run Public Access Site Division of Highways	0.50
Marmet Lock & Dam Public Access Site U.S. Corps of Engineers	1.50*
Meadowbrook Bridge Public Access Site Division of Highways	.50
Mount Storm Lake Public Access Site Dominion Virginia Power	2.70*
Rockhouse Lake Public Access Site Logan County Commission	14.00
Rocky Fork Marsh Streambank Protection Area Cooper R. McQuilkin	0.80*

Seven Islands Public Access Site	
Division of Highways	0.50
State Line Bridge Public Access Site	
Division of Highways	0.50
Tuscarora Creek Streambank Protection Area	
Olean Acres	0.52*
Viola Bridge Public Access Site	
Division of Highways	0.09

*Renewals not included in summary of new acreages

	ACREAGE
13 parcels acquired	2,173.00
11 parcels licensed or leased	20.00
5 parcels licensed or leased agreements canceled	-477.00
Net increase for FY 2013-2014	+1,716.00

OPTIONS TO PURCHASE OBTAINED

AREA	ACREAGE
Camp Creek State Forest	
Camp Creek Outfitters, LLC	95.00
Meadow River Wildlife Management Area	
Thomas A. Vance	74.00
Wallback Wildlife Management Area	
James Wilmoth	32.00

PARCELS IN PROCESS OF ACQUISITION

AREA	ACREAGE
Wallback Wildlife Management Area	
James Wilmoth	32.00
PARCELS IN PROCESS OF ACQUISITION:	1
TOTAL ACREAGE	32.00

PROPERTY MANAGEMENT

The Office of Land and Streams prepared and processed, through various stages of completion, 92 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; Division of Forestry; and other state, county, and local governmental offices.

RIVERS AND STREAM MANAGEMENT

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 2013-2014, 647 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 13-14, 838 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 314,326 tons of sand and gravel from the beds of the streams in 2013-2014, as reflected below:

2013-2014 COMMERCIAL DREDGERS REPORT

Total Tonnage Used

COMPANY	RIVER/CREEK	TYPE	TONS
Tri-State River Products	Ohio River	Sand & Gravel	314,326

Law Enforcement Section



Law Enforcement Section

David E. Murphy, *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

The Law Enforcement Section normally has a staffing level of 123 Natural Resources Police Officers and 11 support personnel. The Section currently has 113 Natural Resources Police Officers. Four Natural Resources Police Officers retired, seven officers and two civilians resigned, and seven new officers and three civilians were employed during fiscal year 2014.

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:

- Participated in numerous public meetings to provide 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 Days Expo at Stonewall Resort State Park.
- Increased ATV patrols on wildlife management areas in an effort to deter unlawful entry.
- Participated in a nationwide program, Operation Dry Water, in an effort to reduce alcohol-related boating incidents.
- Assisted West Virginia State Police in HIDTA, High Intensity Drug Trafficking Area, patrols.
- Conducted training to enable officers to better detect boaters operating under the influence of alcohol (BUI).
- Purchased 22 computers and 23 vehicles.

OFFICER TRAINING

The Law Enforcement Section takes pride in the amount and quality of training provided to Natural Resources Police Officers. Officers log thousands of hours each year sharpening their skills and preparing for the worst.

Several Defensive Tactics classes were held to train officers to defend themselves. Officers were trained in water survival techniques. In an effort to train alongside the United States Coast Guard, DNR officers hosted training on seated field sobriety testing to new officers and USCG personnel.

Natural Resources Police Officers are required by the Law Enforcement Professional Standards Committee to complete 16 hours of in-service training annually. Each of the six districts conduct four regional training sessions annually, consisting of one unit of Defensive Tactics and three units of Firearm instruction, making the DNR Law Enforcement Section one of the state leaders in firearms training.



The Section continues to provide instructors to other law enforcement agencies to assist them in meeting their Law Enforcement Training Committee standards. Some courses conducted include, Defensive Tactics, Firearms, Law Enforcement Boating, and Tracking.

HUNTER EDUCATION PROGRAM

The mandatory Hunter Education Program in West Virginia continues to be a success. During fiscal year 2014, 7,041 students graduated from 479 statewide classes. Volunteer instructors continue to provide a great service to the Hunter Education Program. In fiscal year 2014, 183 instructors drove 13,700 miles and donated more than 3,300 hours to the Program. Natural Resources Police Officers logged 1,600 hours and drove 14,600 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 an on-line class information and registration that can be accessed on the DNR website, www.wvdnr.gov. Online classes are also offered at the same site. Those interested in doing an on-line course have two to choose from. The courses are designed to eliminate the classroom portion; however, once completed, the student must print a voucher and then contact their nearest district office to make an appointment to take a hands-on final exam.

During the 2013 calendar year, West Virginia experienced 13 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 12 Class B hunting incidents resulting in 2 fatalities. Seven of the Class B incidents involved falling from a tree stand resulting in one fatality. One other hunter died of a heart attack. Class B incidents are defined as any other hunting related injury.



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

West Virginia has more than 61,900 registered recreational boats. The owners, as well as their families and friends, have the opportunity to enjoy the activities our waters provide. Unfortunately, the state had 18 boating accidents during FY2014, resulting in 3 fatalities. Alcohol, operator inexperience, and lack of training account for these tragedies.

Boating safety classes are offered in all of the counties in West Virginia. Few take advantage of this training. 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. The Law Enforcement Section is directly involved in either teaching or assisting in these courses. In fiscal year 2014, 34 traditional style classes were taught and 252 students successfully completed the course. Nine-hundred students took advantage of the Internet course option. Anyone born after Dec. 31, 1986, is required to successfully complete a NASBLA-approved course before operating a motorboat. Several news releases 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.

Operation Dry Water, a national campaign to reduce boating accidents, was conducted June 27, 2014 through June 29, 2014. Increased patrols with emphasis on enforcement of drunk boating and reckless operation of a motorboat were conducted across West Virginia and the United States.

WHITewater ENFORCEMENT PROGRAM

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 2014.

The Law Enforcement Section issues all licenses, collects all fees, maintains submitted injury reports, user number reports and trip leader reports for all 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 continue to work together making commercial whitewater operations as efficient 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, 2013 – JULY 3, 2014

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	224	36896	37120	752	104	101	631	258	141	23	59	1469	261	1196
TWO	0	26079	26079	878	171	137	180	123	70	26	25	1180	443	724
THREE	119	29856	29975	638	135	141	400	229	186	41	63	1133	380	735
FOUR	1012	32600	33612	634	127	185	1127	487	374	22	25	1303	298	991
FIVE	662	32934	33596	1328	123	92	727	300	201	27	63	1217	157	1128
SIX	132	25369	25501	912	99	108	700	262	120	22	32	952	119	820
TOTALS:	2149	183734	185883	5142	759	764	3765	1659	1092	161	267	7254	1658	5594

REPORT OF PROSECUTIONS BY CHARGE

FY 2013–2014

HEADING AND CHARGE	DISTRICT							TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX		
LITTERING								
LITTER, LESS THAN 100 LBS.	37	58	9	11	26	27	168	
LITTERING, 100 - 500 LBS.	1	5	3	0	0	2	11	
LITTERING, GREATER THAN 500 LBS.	9	0	18	0	1	1	29	
LITTERING, COMMERCIAL PURPOSE	0	0	1	0	0	1	2	
MANDATORY DISPOSAL OF LITTER	1	5	0	5	3	1	15	
OTHER LITTERING VIOLATIONS	6	2	8	5	4	5	30	
TOTAL LITTERING	54	70	39	21	34	37	255	

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
LICENSE							
RESIDENT HUNTING WITHOUT LICENSE	21	18	22	36	53	48	198
RESIDENT FISHING WITHOUT LICENSE	81	55	41	47	175	99	498
IMPROPER HUNTING LICENSE	0	1	0	0	2	0	3
ALTERING HUNTING LICENSE	0	0	1	0	0	0	1
MAKING FALSE APPLICATION - HUNTING LICENSE	0	0	1	0	1	0	2
HUNTING WITHOUT CLASS A-1 LICENSE	0	0	2	0	0	0	2
HUNTING DEER WITHOUT CLASS N LICENSE	19	4	4	2	8	8	45
FISHING PARAPHERNALIA IN POSSESSION W/O LICENSE	7	24	2	2	10	13	58
HUNTING PARAPHERNALIA IN POSSESSION W/O LICENSE	0	2	1	0	2	4	9
HUNTING BEAR WITHOUT BEAR DAMAGE	0	0	1	2	0	0	3
HUNTING WHILE LICENSE REVOKED	2	0	0	0	1	3	6
FISHING WHILE REVOKED	0	1	0	0	0	1	2
HUNTING MIGRATORY BIRDS WITHOUT FEDERAL STAMP	0	0	0	0	0	3	3
TRAPPING WITHOUT LICENSE	0	0	0	1	0	0	1
MAKING FALSE APPLICATION - LIFETIME HUNT/FISH LICENSE	0	0	0	0	0	1	1
MAKING FALSE APPLICATION - HUNTING AND FISHING LICENSE	0	0	0	0	2	0	2
NON-RESIDENT HUNTING WITHOUT LICENSE	6	4	5	1	6	14	36
NON-RESIDENT FISHING WITHOUT LICENSE	12	92	3	2	15	6	130
IMPROPER FISHING LICENSE	0	2	0	0	0	0	2
OTHER LICENSE VIOLATIONS	9	2	3	2	41	7	64
TOTAL LICENSE	157	205	86	95	316	207	1066

HUNTING

LOADED GUN IN VEHICLE		21	51	31	30	26	159
UNCASED GUN IN VEHICLE AT NIGHT	1	0	3	4	1	2	11
SPOTLIGHTING WITH FIREARM OR IMPLEMENT IN POSSESSION	4	4	7	7	13	3	38
ILLEGAL POSSESSION OF WILDLIFE OR PARTS THEREOF - GAME	62	31	57	37	75	112	374
HUNTING CLOSED SEASON	20	18	12	20	40	28	138
EXCEEDING DAILY BAG LIMIT	3	1	2	3	5	0	14
UNCASED GUN, CLOSED SEASON	0	2	0	0	1	0	3
UNCASED GUN ON SUNDAY	0	1	2	1	0	0	4
FAILURE TO FIELD TAG GAME	23	12	8	5	13	6	67
FAILURE TO CHECK GAME	41	12	9	18	25	49	154
NEGLIGENT SHOOTING	1	0	1	0	0	1	3
SHOOTING FROM OR ACROSS HIGHWAY	7	1	4	12	3	4	31
SHOOTING WITHIN 500 FEET OF DWELLING; 400 CHURCH/SCHOOL	10	6	4	15	10	8	53
HUNTING WITHOUT PERMISSION	43	26	23	17	43	20	172
POSSESSION OF ILLEGAL HUNTING PARAPHERNALIA	0	0	0	1	0	0	1

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
ILLEGAL TRAPPING	2	11	5	0	2	2	22
HUNTING MIGRATORY BIRDS WITH UNPLUGGED GUN	0	0	0	0	0	1	1
ILLEGAL METHOD OF HUNTING - (MUST BE IN 20-2-5)	0	0	1	0	5	3	9
HUNTING AFTER KILLING LEGAL DEER	2	2	0	2	2	3	11
ILLEGALLY CARRYING A PISTOL OR REVOLVER	0	0	0	0	0	1	1
KILLING PROTECTED BIRD	1	1	0	0	0	1	3
ILLEGAL SALE OF WILDLIFE - INCLUDING BEAR	0	1	0	0	0	9	10
ILLEGAL TRANSPORT OF WILDLIFE OUT OF STATE	0	1	0	1	0	3	5
ILLEGAL IMPORT OF WILDLIFE	2	0	0	0	0	0	2
HUNTING OVER BAIT TURKEY/GROUSE/PHEASANT/QUAIL	1	2	1	2	0	2	8
ILLEGAL KILLING OR TAKING OF DEER, TURKEY OR BOAR	3	12	12	7	16	17	67
INSUFFICIENT OR NO BLAZE ORANGE	5	15	14	8	17	14	73
HUNTING ON SUNDAY	3	1	3	11	1	6	25
HUNTING DEER 1/2 HR AFTER SUNSET OR BEFORE SUNRISE	8	5	3	39	6	3	64
SHOOTING AT GAME NOT PLAINLY VISIBLE	1	1	0	0	1	0	3
SHOOTING/HUNTING FROM A MOTOR VEHICLE	27	29	39	27	39	24	185
ILLEGAL KILLING OR TAKING OF BEAR	0	0	1	1	0	0	2
HUNTING WHILE UNDER THE INFLUENCE	0	0	2	0	3	1	6
ATV IN RESTRICTED AREA	1	2	0	0	1	4	8
HUNT WITH CROSSBOW WITHOUT CLASS Y PERMIT	0	3	0	1	0	0	4
HUNT IN VEHICLE WITHOUT CLASS Q PERMIT	0	1	0	0	1	0	2
HUNTING WITHOUT REQUIRED HUNTER EDUCATION CARD	2	0	0	0	15	4	21
INTERFERENCE WITH HUNTING/TRAPPER	0	0	1	0	0	0	1
KILL BEAR OVER BAIT	0	0	0	0	1	0	1
ILLEGAL POSSESSION OF BEAR	1	0	0	0	0	1	2
VIOLATION OF BEAR LAW	1	0	0	3	0	1	5
SHOOTING/HUNTING FROM AN ATV	1	0	0	0	2	0	3
OTHER GAME LAW VIOLATIONS	8	31	10	9	22	4	84
TOTAL HUNTING	284	253	275	282	393	363	1850

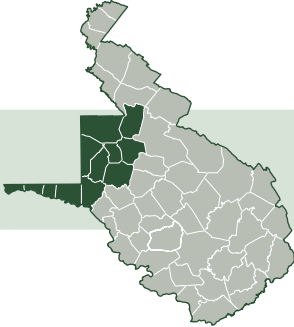
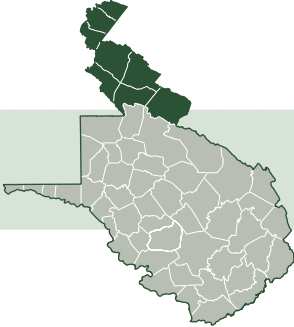
HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
FISHING							
TAKING FISH BY ILLEGAL METHOD	0	2	1	0	3	1	7
EXCEEDING DAILY CREEL LIMIT	2	5	2	1	1	0	11
ILLEGAL POSSESSION OF FISH, MINNOWS AND AQUATIC LIFE	1	0	1	2	1	0	5
TAKING FROGS DURING CLOSED SEASON	0	0	1	0	0	0	1
USING PROHIBITED BAIT IN RESTRICTED AREA	0	8	7	0	0	0	15
FISHING WITHOUT PERMISSION	0	0	1	2	4	0	7
FISHING IN RESTRICTED AREA	2	0	0	0	6	0	8
OTHER FISHING VIOLATIONS	0	1	2	1	11	7	22
TOTAL FISHING	5	16	15	6	26	8	76

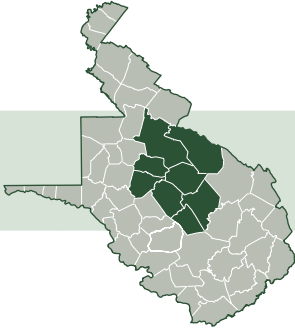
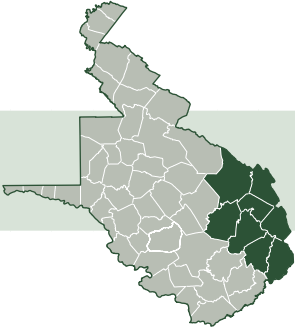
BOATING							
OPERATING UNREGISTERED WATERCRAFT	3	7	2	0	2	2	16
OPERATING WATERCRAFT WITHOUT PROPER EQUIPMENT	4	0	2	0	8	6	20
INSUFFICIENT NUMBER OF LIFE PRESERVERS	12	37	8	5	8	11	81
OVERLOADING A WATERCRAFT	1	2	6	0	1	0	10
IMPROPER LOCATION/SPACING OF NBRS ON WATERCRAFT	0	0	0	0	3	0	3
RECKLESS OPERATION OF WATERCRAFT	2	0	0	0	5	2	9
CREATING A WAKE IN A NO-WAKE ZONE	2	0	6	0	0	0	8
PULLING SKIER WITHOUT OBSERVER OR MIRROR	6	0	2	0	1	2	11
SKIING WITHOUT A LIFE PRESERVER	0	1	2	0	1	0	4
NONE OR NO APPROVED EQUIPMENT	0	0	5	0	0	1	6
OVERPOWERING A WATERCRAFT	0	0	0	0	0	1	1
OPERATING WATERCRAFT WHILE UNDER THE INFLUENCE	0	0	4	0	0	0	4
BOATING UNDER THE INFLUENCE	3	0	0	0	1	4	8
OPERATING WITHOUT REQUIRED BOATER SAFETY CARD	3	0	0	1	2	0	6
PASSENGER UNDER 12 WITHOUT PFD WHILE IN OPERATION	1	1	1	1	3	5	12
OTHER BOATING VIOLATIONS	5	1	12	0	7	5	30
TOTAL BOATING	42	49	50	7	42	39	229

HEADING AND CHARGE	DISTRICT						TOTAL
	ONE	TWO	THREE	FOUR	FIVE	SIX	
WASTE MANAGEMENT							
OTHER HAZARDOUS WASTE VIOLATIONS	0	0	1	0	0	0	1
CONTRIBUTING TO AN OPEN DUMP	5	11	21	4	10	8	59
ENDANGERMENT BY WASTE DISPOSAL	3	0	0	0	1	0	4
WASTE TIRE VIOLATION 22-15-21	0	0	0	0	0	2	2
UNAUTHORIZED USE OF DUMPSTER 61-3-53	0	3	1	1	2	0	7
OPEN BURNING OF REFUSE	11	45	6	6	8	21	97
FAILURE TO SHOW PROOF OF PROPER DISPOSAL	6	49	2	4	5	4	70
OTHER SOLID WASTE VIOLATIONS	17	1	23	10	38	5	94
TOTAL WASTE MANAGEMENT	42	109	54	25	64	40	334
POLLUTION							
STREAM POLLUTION	0	0	0	0	1	0	1
PUBLIC HEALTH OFFENSES, CHAPTER 16	0	0	0	0	0	2	2
TOTAL POLLUTION	0	0	0	0	1	2	3
FORESTRY							
ILLEGAL BURNING	13	5	11	8	15	9	61
ABANDONING A FIRE	2	1	1	1	1	1	7
PERMITTING A FIRE TO ESCAPE	5	0	3	1	0	0	9
FAILING OR REFUSING TO FIGHT FIRE	0	0	0	0	0	1	1
VIOLATIONS OF GINSENG REGULATIONS	1	0	0	14	6	0	21
OTHER FORESTRY VIOLATIONS	6	0	2	6	2	4	20
TOTAL FORESTRY	27	6	17	30	24	15	119
GENERAL							
VIOLATION OF PARK REGULATIONS	8	26	4	8	11	0	57
WITHHOLDING INFORMATION	9	5	3	2	9	3	31
OBSTRUCTING, HINDERING, OR INTERFERING WITH OFFICER	1	0	4	3	2	26	36
CONSPIRING IN A VIOLATION OF CHAPTER 20	51	24	39	8	30	45	197
OFFENSE OUTSIDE CHAPTER 20	43	77	15	21	27	60	243
VIOLATION OF NATIONAL FOREST REGULATIONS	0	0	3	0	0	0	3
DRUG RELATED VIOLATION	11	12	3	16	3	8	53
CAPTIVE CERVID VIOLATIONS	3	0	0	0	0	2	5
WMA VIOLATIONS	11	89	2	12	12	5	131
CONSPIRING IN A FISHING VIOLATION OF CHAPTER 20	2	0	0	0	0	0	2
MISCELLANEOUS VIOLATIONS	48	5	12	23	15	17	120
TOTAL GENERAL	187	238	85	93	109	166	878
TOTAL ALL PROSECUTIONS	832	946	621	559	1009	877	4844

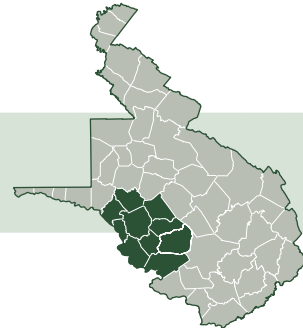
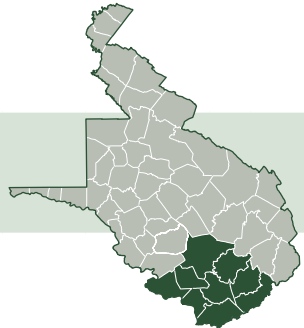
PROSECUTION PROGRAM BY DISTRICT

FY 2013-2014

DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions			
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR
ONE		1,030	Barbour	89	\$2,885.00	\$12,856.75	80	9	0	0
			Brooke	44	\$2,310.10	\$6,307.45	39	5	0	0
			Hancock	49	\$2,465.00	\$6,777.90	42	7	0	0
			Harrison	128	\$6,535.50	\$19,415.80	122	6	0	0
			Marion	105	\$4,391.00	\$15,200.20	96	9	0	0
			Marshall	36	\$560.00	\$1,923.00	12	23	0	1
			Monongalia	117	\$3,297.30	\$17,334.50	108	9	0	0
			Ohio	61	\$1,240.00	\$6,554.70	41	19	0	1
			Preston	70	\$7,725.75	\$7,964.40	52	18	0	0
			Taylor	38	\$1,715.00	\$5,546.65	29	9	0	0
			Tucker	37	\$415.00	\$3,305.02	20	17	0	0
			Wetzel	65	\$2,975.00	\$7,902.25	50	15	0	0
			TOTAL DISTRICT 1	839	\$36,514.65	\$111,088.62	691	146	0	2
			TWO		373	Berkeley	117	\$5,336.20	\$14,588.25	91
Grant	72	\$10,646.55				\$10,740.45	68	1	0	3
Hampshire	207	\$8,300.25				\$27,617.55	168	35	2	2
Hardy	155	\$8,265.00				\$21,694.20	136	17	1	1
Jefferson	218	\$6,839.90				\$29,773.45	179	11	0	28
Mineral	90	\$3,691.20				\$11,821.25	74	12	0	4
Morgan	22	\$534.50				\$2,313.50	14	6	0	2
Pendleton	44	\$2,880.00				\$6,350.30	39	2	0	3
TOTAL DISTRICT 2	925	\$46,493.60				\$124,898.95	769	95	3	58

DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions			
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR
THREE		815	Braxton	37	\$1,207.40	\$5,283.85	31	5	0	1
			Clay	62	\$2,540.00	\$7,857.25	49	13	0	0
			Lewis	141	\$5,950.00	\$21,925.80	118	12	0	11
			Nicholas	144	\$8,420.75	\$18,877.50	109	29	0	6
			Pocahontas	41	\$4,025.00	\$6,102.00	38	1	1	1
			Randolph	64	\$2,255.00	\$9,340.96	57	4	0	3
			Upshur	80	\$5,020.00	\$13,401.40	79	1	0	0
			Webster	56	\$4,720.00	\$8,022.35	50	4	0	2
			TOTAL DISTRICT 3	625	\$34,138.15	\$90,811.11	531	69	1	24
			FOUR		1,988	Fayette	91	\$3,050.00	\$9,479.75	59
Greenbrier	154	\$6,198.00				\$18,545.70	116	34	0	4
McDowell	53	\$1,530.00				\$8,602.80	29	15	0	9
Mercer	49	\$1,545.50				\$6,508.15	37	9	1	2
Monroe	23	\$910.00				\$3,364.95	21	1	0	1
Raleigh	56	\$948.00				\$2,975.00	21	35	0	0
Summers	65	\$3,245.00				\$7,212.85	46	16	0	3
Wyoming	69	\$2,120.00				\$8,814.25	54	14	0	1
TOTAL DISTRICT 4	560	\$19,546.50				\$65,503.45	383	138	1	38

DISTRICT	TOTAL ARRESTS	TOTAL WARNINGS	COUNTY	NUMBER OF PROSECUTIONS	Amounts Assessed		Dispositions of Prosecutions			
					FINES	COSTS	CONVICTED	DISMISSED	ACQUITTED	FAILED TO APPEAR
FIVE	1,543	1,228	Boone	58	\$2,665.00	\$8,173.75	51	7	0	0
			Cabell	143	\$1,917.05	\$9,078.15	55	86	0	2
			Kanawha	202	\$1,700.50	\$6,924.51	48	143	0	11
			Lincoln	98	\$2,412.80	\$9,147.51	54	44	0	0
			Logan	80	\$1,100.00	\$5,814.00	36	44	0	0
			Mason	125	\$4,222.85	\$16,502.75	100	25	0	0
			Mingo	91	\$1,640.00	\$9,458.60	60	31	0	0
			Putnam	123	\$2,058.95	\$11,011.10	62	35	1	25
			Wayne	88	\$479.75	\$1,924.05	12	71	0	5
			TOTAL DISTRICT 5			1008	\$18,196.90	\$78,034.42	478	486
SIX	1,119	1,082	Calhoun	93	\$5,250.00	\$11,217.00	69	24	0	0
			Doddridge	14	\$730.00	\$3,044.05	14	0	0	0
			Gilmer	10	\$620.00	\$1,226.75	7	3	0	0
			Jackson	156	\$2,109.75	\$14,621.55	89	62	0	5
			Pleasants	10	\$1,240.00	\$1,122.30	7	3	0	0
			Ritchie	31	\$1,150.00	\$4,206.25	25	6	0	0
			Roane	121	\$6,420.00	\$18,872.90	114	7	0	0
			Tyler	35	\$710.00	\$3,205.00	20	15	0	0
			Wirt	79	\$2,275.00	\$9,539.50	59	20	0	0
			Wood	338	\$11,362.00	\$43,836.75	271	56	0	11
TOTAL DISTRICT 6			887	\$31,866.75	\$110,892.05	675	196	0	16	
STATE TOTALS	6,665	6,516		4844	\$186,756.55	\$581,228.60	3527	1130	6	181





Parks and Recreation Section



Parks and Recreation Section

Kenneth K. Caplinger,
Chief
Emily J. Fleming,
Acting Chief

OVERVIEW

The mission of the Division of Natural Resources 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 34 state parks, eight state forests, five wildlife management areas, the Greenbrier River Trail, and the North Bend Rail Trail. The Parks Section manages or assists in managing more than 197,000 acres of public land and sees up to 7-million visitors annually in locations as diverse as undeveloped natural areas to multi-faceted resort parks. The park system manages 1,902 campsites, 810 lodge rooms, 369 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, \$88 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 have numerous other environmental and cultural benefits.

GENERAL INFORMATION

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. Indeed, 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 proving challenging to maintain this performance due to factors beyond the control of system managers.

Administrative fees paid to other state agencies have grown tremendously over the past six years. Likewise, employee benefit and utility costs have increased a great deal. Governmental group conference business has also suffered throughout the lodging industry as governments at all levels make cutbacks.

Additionally, we are already feeling the effects of shortened summer vacation seasons in the public school system. Schools outside of West Virginia began the shortening process this past year and in the coming two years, school systems throughout West Virginia will be making this change. This will significantly impact summer mid-week use of all our areas and most likely create an even greater demand for facilities and activities during the shortened vacation season and on weekends. It is also

expected to significantly impact the availability of recruiting and hiring summer help as many of these staff members are students or educators working on areas as summer help.

The expanded Twin Falls lodge, new Blackwater cabins, and the new campground at Little Beaver have all been popular with the public. The long-needed \$36 million rehabilitation of Canaan Valley Resort State Park funded by a Lottery Revenue bond was completed in October 2013. A contract for a new management company was awarded, and by the end of the reporting period, the company was gearing up to begin operations July 1. The upcoming \$23.5 million Cacapon improvement and expansion is projected to be profitable, and funding should also soon be in place for a new 75-room lodge at Beech Fork if the necessary Army Corps of Engineers land lease can be obtained. Lottery bonds remain to be sold for both Cacapon and Beech Fork to allow the projects to move ahead.

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 FY15 total of all accounts will equal \$42,359,556. The General Revenue appropriation in FY15 is \$12,809,818 and is used solely for classified service salaries and benefits for the majority of full-time 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 FY14 were \$2,298,920 and are also used exclusively for Parks salaries and benefits. Special Revenue Account 3265 is projected to receive \$21,953,967 in FY15 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. Lottery funds of \$296,851 were also dedicated to park advertisement in FY15. Lottery Account 3277 monies amount to \$5 million per year. Of this, some \$3,522,350 is used for routine repairs and the remaining \$1,477,650 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 completed an assessment which details \$11.2 million in immediate repair needs, \$23.7 million in short-term (two to three year) repair needs and \$17.1 million in less critical deferred maintenance items. Examples include McKeever Lodge water lines and plaza, the Pipestem Recreation Building and the Twin Falls pool/Pro Shop building.

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 and across-the-board cuts in 0265 and 3267 which were not accompanied by any allowance of facility cutbacks. This had 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. Additionally, a Supplementary Appropriation for \$3,735,796 to meet contractual obligations at Canaan Valley State Park also reduced that potential burden on Parks Operational Fund. The recently completed renovation of Canaan Valley Resort State Park, the conversion to management contract rather than a concession contract, other recently opened new facilities (Little Beaver Campground, Blackwater Falls Cabins, and the Twin Falls Lodge Expansion), and the planned expansion of Cacapon Lodge will help with the inflationary increases in operational expenses but will not fully address it. Further, these benefits will not fully develop until several more fiscal years have passed. There is also the proposed 75-room lodge for Beech Fork which is projected to be profitable, but this will be slower to develop due to the Army Corps of Engineers land lease approval process.

Sales and Revenue

State Parks continues to try to recover from the effects of the two major storm events that pounded the state in 2012. Revenue production from park facilities was down more than \$600,000 in FY14 compared to FY13 and down more than \$1.6 million from FY12. In addition to recovering from the effects of the 2012 storms, FY14 revenue was significantly affected by an unusually cool and wet spring, the conversion of the Blackwater restaurant to concession operation and the changes in public school summer vacation times from surrounding states and to a lesser degree in West Virginia. There is a major concern regarding the effects public school vacation times might have on future operations.

Revenue production in state parks is led by five major sales centers. These are lodging (\$5.4 million), cabins (\$4.9 million), food and beverage (\$1.3 million), camping (\$1.8 million), and gift shop sales (\$1.7 million). Taken together, these facilities/services bring in approximately 76 percent of the park systems annual operating revenues each year. 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. Facility managers continue to be creative in providing recreational opportunities and amenities to keep the system relevant while maintaining the system's purpose and keeping within budgetary constraints. 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 number one revenue producer, special effort is always directed at these facilities, especially in the offseason. A group sales staffer working from Pipestem Resort State Park markets that park in particular as well as the system at large to various organizations throughout the state and country. Efforts include sales and telemarketing calls to corporations, state and federal government agencies, travel agencies, tour groups and the like. Direct mailings and travel shows are also used frequently. The challenge is to attract offseason, mid-week business to supplement typically brisk business at other times. Email campaigns and social media tools have made a difference in bringing exposure of facilities and special events/pricing. The system's Chief Naturalist/Activity Programmer, who works from South Charleston, is also heavily involved in sales and promotions.

Administrative Management

To support the 49 units that comprise the system, there were 433 full-time employees, approximately 950 hourly employees at the peak of seasonal employment, and 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 Coordinator 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 systems 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. The same is true of the current rebuild of Canaan Lodge.

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. Most will be remedied as part of \$54 million in Lottery "East" Bond funded projects that are now ongoing. As a state statutory requirement, a monitoring and evacuation plan is kept current for each major dam.

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 enforcement, 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 fires, which occur on or threaten 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 completed throughout the year.

Programs

Park and forest programming focuses on the natural environment and history of the specific areas and West Virginia in general, provides events that attract visitors for both day-travel and overnight use, and offers 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 programs to include hikes, water study, etc., and to engage visitors in discovering and understanding the outdoors through interpretative interaction. Energizing families to get outside continues to be a priority. Year-round programmers are on site at six state parks with year-round lodges and include nature-based activities through hikes, nature center visitation and special weekends. Special summer programs also include entertainers or presenters. Seventeen parks or forests employ an individual on an hourly wage as a summer naturalist. These are front-line ambassadors with vacationing guests and often introduce visitors to West Virginia and the natural heritage and character of the state.

Special event and entertainment examples include Mansion by Candlelight and Island Frolic Evening Cruises at Blennerhassett Island; Murder Mystery Trains at Cass Scenic Railroad; eagle surveys at Pipestem; Hawks Nest dinner theaters; 18th century encampments; Civil War reenactments and others. Special events generally include an overnight lodging component. Most are scheduled on weekends and in the shoulder seasons or winter months to attract visitation and support revenue production.

INDIVIDUAL AREA AND SECTION ACTIVITY REPORTS

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; 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 modern development at parks like Canaan, Pipestem, and Stonewall to historical structures dating from the 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, compliance programs, and similar management challenges are described elsewhere.

Audra State Park

Electricity was installed to two campsites this spring and plans made to complete more. This was all made possible from money given by the Barbour County Commission. Repairs were made to the exterior of the large campground bathhouse, and the building was painted afterward. Renovations were completed on all park public restrooms.

Babcock State Park

Three new cabin woodsheds were constructed and put into use in the cabin area. Major electrical repairs were required at the Manns Creek sewage treatment plant. The wooden sides and handrails of the newly installed WVDOH bridge that crosses Glade Creek beside the Grist Mill were stained by park staff to better match the appearance of the Glade Creek Grist Mill and surrounding wood structures. The exterior of Cabin 12 was re-stained and the chinking was also repainted. The Sugar Camp Run and Boley Lake restroom exteriors were re-stained. Several sets of mattresses and box springs were received from Canaan Valley State Park and installed in the standard cabins. Three new trash can containment enclosures were installed at the campground to help with the bear problems in that area. The park hosted the 10th Annual Grist Mill Grinder trail foot race. The kitchens and bathrooms in two cabins received new vinyl floor coverings, and the living room and dining areas of these cabins were also sanded down and given a fresh coat of polyurethane. Several heavy duty charcoal grills were fabricated in-house and installed at the picnic areas and rental cabins to replace old rusted broken down grills. A new weatherproof countertop was installed at the heavily used campground dishwashing station. Two new mainline 4-inch water valves were installed in the water line supplying the Sugar Camp Run water reservoir.

Beartown State Park

Operations at Beartown State Park in FY14 were mostly routine, with dozens of group and individual tours given, and many comments were received wherein visitors claimed enthusiastically that Beartown was their absolute favorite park. Facility improvements included repairs to boardwalks, temperature data loggers were maintained in the ice hole, and a few hazardous trees were removed.

Beech Fork State Park

Boundary markings and new signs were installed to the Camp Branch and Bowen Cemetery area. Extensive repairs were made to deteriorated support framing and the roof of Shelter 2. Repairs were made to eroding privacy landscaping at cabin area. Improvements in the cabins include upgraded kitchen lighting and adding luggage racks, hair dryers, irons, and ironing boards to all cabins. The Camper's Corner store was reorganized, and a downsized menu was put in place at the pool concession. The annual spring cleanup was held April 5 with 144 volunteers, 1,152 hours donated, 364 bags of trash picked up, and 74 tires collected.

Berkeley Springs State Park

The main project for the fiscal year reporting period was the replacement of the Museum main entrance stairway and decks. The old wooden steps had deteriorated and were unsafe. The Old Roman Bathhouse metal roof was pressure washed, patched, primed and painted with the use of a rental lift. The swimming pool filter system was serviced and new lateral drain lines installed. The headquarters heating system was replaced. The 40th Annual Apple Butter Festival, held in October, drew an estimated 30,000 guests over the two-day event.

Berwind Lake Wildlife Management Area

The annual Kids Fishing Day was once again a huge success, and plans are already in place for next year. The weather had a significant impact on the area throughout the year. Thunderstorms in the spring and early summer caused massive runoff around the lake and along the road to the campground. Maintenance crews spent a good deal of time after each storm clearing out drainage ditches and

regrading the roads into the campground. Over the winter, massive snowfall and extreme cold temperatures caused many power outages as well as several waterline breaks in the pool shower house.

Blackwater Falls State Park

The new Sled Run conveyor was completed and it underwent the first annual summer maintenance. While natural snowfalls were not always optimal and temperatures may have been the coldest on record, use of the new facility over the winter was brisk and offered the park a healthy wintertime revenue stream. Septemberfest Senior Fling observed its 33rd year of participation, consisting of a weeklong list of trips, events, tours and nature activities and crafts. Blackwater Falls hosted the annual Brunch with Santa and New Year's Eve Bash to good attendance and participation. The park hosted the 52nd Annual WV Wildflower Pilgrimage in May.

Blennerhassett Island Historical State Park

This year marked a substantial increase in the special events offered. More nature programs, evening events, and reenactments were added to the schedule. This included a Civil War reenactment which was held on the island for the first time in many years. These events, along with an increase in sternwheeler charters and weddings, translated into a significant increase in attendance and revenue. There was a 7.7 percent increase in attendance and a \$77,000 (32.6 percent) increase in revenue for FY14. The 2013 controlled hunt harvested 41 deer, but the population on the island continued to be too high, and another hunt is planned for 2014. Plans continue for the installation of docks on the island, pending approval from the Corps of Engineers. A new set of steps leading up the bank of the island was fabricated and installed by park staff to give boaters access to the park facilities. A Boy Scout Camporee was held on the island in the spring. As part of the event, more than 300 Scouts assisted in the installation of the first hiking trail on the island.

Bluestone State Park

A record number of floods were recorded this year starting with morning of July 4, 2013, that closed the East Shore Campground, the Pit Area, Old Mill campground, and half of the Meador campground during one of the busiest times of the summer. The Lilly Bridge replacement project continued, causing some traffic delays. Out of this project, however, a plan was approved for the construction of a new access road to the Pit Area. New decks were built on two cabins, the walls and ceilings were refinished in four cabins and several underground heating oil tanks and grills were replaced in the cabin area. The Junior Nationals APBA Boat Races were held again at Bluestone Lake, with a record number of boats.

Bluestone Wildlife Management Area

Most of the year was spent on routine maintenance on all area campgrounds and roads. Several instances of high water required the usual preventive work and cleaning up afterward. Brush was cut back from roadsides and in the campgrounds. Several pit toilets were rebuilt, a storage room was built in the office, campground stream banks were cut, and the pavilion plumbing was replaced.

Cabwaylingo State Forest

The Division of Highways paved the main forest road, the Spruce Creek Campground road, and part of the cabin area road. The DOH is in the planning stages of a bridge replacement project that will involve two bridges on the area. One bridge is at Spruce Creek and the other is in the Group Camp. The Crum Morgan Shelter was re-roofed.

Cacapon Resort State Park

The centerpiece project for Cacapon in the FY14 period was the restoration/renovation of the Old Inn facility. It was a very involved project that will add years to the Inn's life and better accommodate guests. The building was completely rewired to meet current standards, the roof was replaced, the building was insulated, deteriorated logs were replaced or rechinked as needed, and the structure

was stained. The end result is a facility that will accommodate the demands of today's travelers while maintaining its historical appearance. The vast majority of the work was done in-house. All other work for the year was routine in nature.

Camp Creek State Park

One of the most significant improvements in Camp Creek State Park and Forest's recent history is the acquisition of 95.5 acres of private property located in the center of the forest. Besides ridding the area of multiple no trespassing signs adjacent to trails, staff established a new Pack It In – Pack It Out camping area, trails and wildlife area on this new property. Two new footbridges and a handicap walkway project were completed. Staff upgraded three sites in the modern campground to full-hookup and installed another round pen campsite in the Double C equestrian campground. Other work included replacing grills throughout the park, repairing fascia and guttering at the shower house, and installing a roof on the amphitheater deck. The WVDOH assisted with repairs to a section of road that was eroding next to Campbell Falls. FY14 was a record-setting year for Camp Creek's attendance and revenue.

Canaan Valley Resort State Park

Canaan Valley Resort State Park received more than \$35 million in bond appropriations for renovations to the lodge, conference center and ski area. The renovations and construction took more than two years and is finally complete. Improvements included the addition of two new 80-room wings to the north and south sides of the conference center, a facelift to the exterior of the lodge, a new portico and new main lobby. Improvements to the ski area included a new tube run with a magic carpet system to transport tubers back to the top of the run. The new 1,200-foot tube run proved so popular that park staff made modifications to allow for two additional lanes to handle the volume. A new warming hut was also constructed at the base of the tube run. It has been a very functional addition and is used to base the five stall sporting clay range in the summer. The sporting clay range continues to increase in popularity every year. The warming hut has also been used for other events throughout the year, including the annual Wheeling Symphony concert. There were also upgrades to snowmaking capabilities and upgrades to A, B, and C Buildings at the ski area.

Carnifex Ferry Battlefield State Park

Staff completed several small projects in the picnic area that enhanced the beauty of the area. New trashcan holders were built for the large size trash cans that surround the parking lot. An information kiosk, built by an Eagle Scout candidate, was installed in the picnic area at one of the Patterson Trail trailheads. All picnic shelters, snack stand, museum, sign shop and maintenance garage received a new coat of paint. The Sign Shop has expanded its operation to include the Wildlife Resources Section sign fabrication. With their help, all computers and software associated with the operation of the sign shop have been replaced and/or upgraded. Park staff fabricated 2,058 signs in FY14.

Cass Scenic Railroad State Park

Mountain State Railroad & Logging Historical Association sponsored and paid for the paving of a 10-foot wide path at the Whittaker Station offloading location for train riders. This path transitions to an eight-foot wide path leading to the snack stand, restrooms and logging camp exhibits, making the area fully ADA accessible. Two new additional wheelchair lifts, one on each train, were installed to allow better access at Whittaker Station and Bald Knob. Cass hosted the annual VIPP picnic with more than 234 attending. The picnic included a ride to Bald Knob and a barbecue lunch at Whittaker Station. Ten Company House bathrooms were remodeled, including the addition of ceramic tile floors. Special events hosted at the park this year included Rail Fan Weekend, 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, Photography Workshop Weekend and Fly Fishing Workshop Weekends.

Cathedral State Park

The extended cleanup required by the devastation of the snowfall related to Hurricane Sandy in October 2012 was finally completed. All facilities, areas, and trails were reopened in May. However, two days later Cathedral suffered damage from flash flooding. Blackwater Falls maintenance staff assisted with repairs to a footbridge and other work to reopen the Cathedral Trail. Work to resurface the trails that were washed out was still ongoing at the end of the reporting period.

Cedar Creek State Park

The park staff refurbished the exterior of the one-room school at Cedar Creek with a fresh coat of paint. The group camping area of the park received a total renovation by the staff beginning with landscaping to allow for proper drainage. Ten new campsites were constructed with pads, receiving base material and finish gravel. Water and electric lines were installed to provide 30-amp power to all sites. A 20' x 30' picnic shelter with concrete floor was also built as a central gathering location with adequate lighting and power provided. The staff installed three fiberglass sand filters at the swimming filtration building. These filters were obtained from Watters Smith State Park, and this long needed upgrade replaced metal filters that were more than 30 years old. New soffit and fascia were applied to the first bathhouse in the camping area.

Chief Logan State Park

Special events at Chief Logan State Park included the annual Sue Browning Wildflower Hike, The Aracoma Story, Inc. Productions, Aunt Jennie Wilson Music Festival, Civil War Reenactment, 2nd Annual WV Independent Music Festival, 2nd Annual Irish Road Bowling, Twisted Terror Haunted Trail, and Christmas in the Park. Approximately 600 feet of underground water line was replaced near the booster station. A secondary fence barrier was installed at the bear enclosure at the Wildlife Exhibit. An additional door was installed at the Bobcat cage. The campground wastewater plant dosing tank was replaced. A bench was installed near the water fountain donated by the General Federation of Women's Clubs of West Virginia. Eagle Scout candidates did a service project in the park including building and installing a bulletin board near the museum and painting the Mud Lick Hollow restroom.

Chief Logan Lodge

In its eighth year of operations, the lodge suffered from the impact of poor local economies with a drop in revenues and occupancy percentages. A continued drop in the issuance of coal mining permits in the southern coal fields and continued mine lay-offs affected other businesses such as housing, coal mining supply companies, and restaurants. The lodge occupancy rate of 54 percent last year fell to 38 percent this year, which produced the second consecutive year of decreased revenue. In an attempt to turn this trend around, the lodge department heads and managers met at the DNR office monthly to explore options, opportunities, and to work on strategic action plans in order to increase revenues. Opportunities explored and/or adopted were the addition and expansion of overnight guest room packages and room add-ons, various outdoor/indoor games, increased restaurant hours, the opening of the lodge's lounge, addition of pet friendly rooms, increasing gift shop sales of West Virginia items, and by establishing more lodge-sponsored parties, dances and events.

The recreation center adjacent to the lodge continues to provide park guests and the community with activities. The completion of a connector road between the lodge and main park was still in the planning stages. Also in the discussion and planning stages are increased bandwidth on Wi-Fi systems and cellphone access.

Coopers Rock State Forest

The Overlook Trading Post Gift Shop at Coopers Rock State Forest was renovated and upgraded. The main sales area received new shelving and display units which allowed better utilization of available space and better presentation of product. A storage room was converted into a new sales area allowing more products to be available for resale. Another storage room was renovated with shelving and

storage containers in order to hold all back stock. The Eagle Grill which is connected to the Trading Post also received some upgrades in the way of new cookers, coolers, freezers, menu boards and product. The renovations and new products helped the forest realize a significant increase in revenue. New trailhead kiosks were purchased and installed at all of our trails. These kiosks will contain maps and information to aid hikers in navigating our trail system.

Droop Mountain Battlefield State Park

In commemoration of the 150th anniversary of the Nov. 6, 1863, battle at Droop Mountain, a series of four memorial hikes, a reenactment, a monument dedication, and related projects were successfully completed in the early half of FY14. Numerous visitors traveled from as far as Colorado to participate in the memorial hikes which followed three Union army routes as well as the 27-mile Confederate route from Lewisburg. The Confederate hike was held exactly 150 years after the original, mostly during the night, and was followed the next day by the dedication of a newly constructed stone and bronze monument listing the names of men killed in the battle. Descendants of soldiers read the names aloud one by one, probably the first time those who died at Droop Mountain had been so honored. The sesquicentennial events generated numerous favorable media articles, video clips and reports. Two VISTA volunteers spent many hours of work organizing and digitizing museum records. Many family reunions and weddings were hosted; numerous presentations were given for schools and other groups; and hundreds of park tours were given for groups, families and individuals.

Greenbrier River Trail

Crews built another picnic shelter near a small wetland area close to the town of Marlinton. Two more composite park benches were installed along the riverbank near Caldwell. Approximately 20 directional road signs were installed by the WVDOH to replace older faded signs, including new signage on I-64 east and west of Lewisburg. Boxley Stone Company conducted their first community green project which was a litter removal project along the GRT.

Greenbrier State Forest


The floor of Cabin 5 was rebuilt; and new flooring was installed in the bath and kitchen of both Cabin 5 and 6. Satellite television was installed in nine cabins and the Activity Building. The reservoir water system for the pool area was replaced with a pressurized water system and the old gas furnace and galvanized piping that supplied hot water for the bathhouse were replaced with electric hot water heaters and PVC pipe. The pool sales area was completely remodeled. The chemical controller for the wading pool was replaced. The water plant in the campground was restructured to provide better service. Approximately 1.5 miles of new trail was constructed and added to the trail system. Parking areas for several cabins were enlarged and graveled along with the cabin road. The picnic area bathrooms were re-plumbed. Derecho damage at the rifle range was cleared. The annual Show-Me Hike (spring wildflower hike), Greenbrier County Boy Scout/Girl Scout Day Camp, and the Civil War Re-enactment of the Battle of White Sulphur Springs were hosted by the forest.

Hawks Nest State Park

Hawks Nest State Park continues to be a favored place to visit and stay as occupancy and revenue remain fairly stable in an ever-fluctuating economy. Attracting new groups and visiting public for increased revenue continues to be our goal. Park improvements include the replacement of an antiquated HVAC system in the park headquarters with a new more efficient system, repainting the interior of the lodge, new signage and general park maintenance. The first ever "Spring Clean-Up" was held in April 2014 with participants from neighboring schools.

Holly River State Park

The park experienced another extended power outage from July 12 through July 31. Testing of the electrical system revealed three bad transformers and a fault in a 200-foot section of the new buried



cable. Contractors also removed the abandoned utility poles that remained after the replacement of the old electrical system. The park purchased 325 tons of crushed stone, which was spread throughout the campground and cabin areas. WorkForce WV crews continued to clear downed trees and debris from trails and recreation areas left in the wake of the snowstorm related to Hurricane Sandy. A public Wi-Fi system was installed at the office/restaurant building.

Kanawha State Forest

The former snack bar at the swimming pool was converted into a Nature Center and general event space for the forest. A projector screen, LCD projector, stackable chairs, and folding tables were donated by the Kanawha State Forest Foundation for use during special events and interpretive programs. Approximately 90 percent of trail signage was replaced, all trail blazes were repainted, and all trail corridors have been trimmed back. Approximately 25 percent of the forest boundary was re-marked.

Kumbrabow State Forest

The Mill Creek Stream Restoration Project was completed this past year. The project consisted of clearing debris and building structures along the stream to improve native brook trout habitat. Crews from the Division of Forestry and the Wildlife Resources Section worked along the stream from the superintendent's residence through the cabin area and to Mill Creek Falls. Deteriorating wooden signs were replaced with the new plastic laminate signs throughout the park. The outdoor cooking grills and picnic tables were replaced at the cabins and bear-proof trash receptacles were placed in the campground and picnic areas. Two picnic shelters were also painted at Meatbox Picnic Area and Glade Run. A picnic area was converted into a group camping area with several groups using the facility in the first year of operation.

Laurel Lake Wildlife Management Area

Major improvements were made to fishing access around the 29-acre lake with grant funding provided by the Wildlife Resources Section. The front parking lot was paved and guard rails were added. The Wildlife Resources Section also assisted in stabilizing the floating pier structure. Many staff-hours were spent clearing brush from around the lake shoreline and establishing fishing access sites. ADA improvements included a new bridge to help aid access to restroom facilities and concrete ramps for shelter access. Electric service was added to two shelters with the help of the foundation which received donations from Mingo County and Cotiga Land Company to fund the project. The foundation also assisted with holding various events on the area including the first haunted trail, music in the park, Homecoming and various other programs.

Little Beaver State Park

Six new paddle boats were purchased and received at the end of the 2013 summer season. They were put into use for the first time in the summer of 2014 and had an immediate impact on revenue. The trail head and parking area at Beaver Creek Trail was improved by cutting brush around the site and re-graveling the lot. There were several hazardous trees removed from the campground area. PEM began work on replacing the siding on the park headquarters building. Repairs were made to several water lines frozen due to the unseasonably cold winter temperatures.

Lost River State Park

Improvements in the cabin area included repairs to the footbridge leading to Cabin 2, a new water line to Cabin 10, new deck lights at Cabin 15, new kitchen flooring in Cabin 18, and removing dead trees from various cabins. Extensive renovations were made to Cabin 6, including a new roof, building a new porch roof, new water and sewer lines, and kitchen remodeling. New grills were installed park-wide. Thirty new plastic laminate park signs were installed in various areas of the park. The platform at the Cranny Crow Overlook was rebuilt. Windows in several of the cabins were re-glazed and repainted. The park gift shop was renovated with new subfloor and carpeting, then painted. Electrical wiring in the

swimming pool pump house was replaced and conduit was added. New furniture was added to four of the rental cabins in the park. An old footbridge on the Howard's Lick Trail was removed and a new bridge was built in its place. A new 24x20 foot woodshed was built to keep firewood dry and cured for guest cabins.

Moncove Lake State Park

Park staff constructed and added two 16-foot sections of floating boat dock to extend access for boaters. Three segments of floating boat dock were salvaged from the old dock and were installed on the upper portion of the lake as waterfowl hunting platforms. The shelters, exteriors of the upper bathhouse, and shop along with the interior of the lower bathhouse were painted. The Union Lion's Club hosted the 3rd Annual Kid's Fishing Derby in April with more than 100 children in attendance. The Easter Divide Chapter of the National Wild Turkey Federation hosted the 2nd annual JAKES day youth event with approximately 150 youth in attendance.

North Bend Rail Trail

This year preliminary groundwork began with WVDOH, Engineering and the North Bend Rail Trail Foundation to establish priority projects for a \$410,000 grant for drainage and surface work on the eastern end of the trail.

North Bend State Park

Fiscal year 2104 was positive. Overall guest satisfaction remains strong and staff continues to refine the programs and services offered to maintain the lodge occupancy and revenue numbers. Park revenue was 3 percent above FY13 and 10 percent above the five-year average. Lodge occupancy was 2 percent above last year and 6 percent above the five-year average. Cabin occupancy was down 5 percent from FY13, but saw no change compared to the five-year average. Campground occupancy was 3 percent above last year and 4 percent below the five-year average. The major project for the maintenance staff was to continue to work on the ongoing cabin renovation program. All the cabin floors have been refinished. In three of the cabins, all of the interior wall surfaces have been sanded and refinished and one cabin exterior was refinished. This year, all the roads in the park and three of the larger parking lots were repaved.

Panther Wildlife Management Area


A new waterline was installed to Sandy Bottom and four new shut-off valves were installed in the waterline leading to the Group Camp. At the lower Group Camp Building, new storm doors and steps were installed on the porch, a window was replaced, and the roof between the dorms was resealed. Due to the harsh winter, several waterlines had to be replaced in the upper building at the Group Camp. The pool and most of the area signs were painted during FY14.

Pinnacle Rock State Park

As part of the Reaching the Summit Community Service Initiative with the Boy Scouts of America, in conjunction with their Jamboree, the park hosted a group of 40 Scouts and Scout leaders for three days. They repainted the shelter, the restrooms, and all the picnic tables inside the shelter. They also painted the picnic tables outside of the shelter and did maintenance work on the handicapped fishing pier, which included replacing broken boards and painting the entire pier. Park staff re-blazed many of the hiking trails in the park, including Homestead Trail, Beaver Pond Trail, Acorn Ridge Trail and Turkey Rock Trail.

Pipestem Resort State Park

Aesthetic enhancements to the golf courses were completed with the help of a bequest by a supporter of the park. This included purchase and installation of a gazebo and three pond fountains and the necessary electrical and control hardware. An effort to display golf merchandise in two display cases



in the lodge paid off with increased sales in the park's two golf shops. Full online reservation of nearly 100 percent of Pipestem's campsites was achieved this year to good reviews from both the staff and the visiting public. The necessary hardware improvements were made to allow a computer terminal at the campground registration building to communicate with existing RoomMaster software, which turned out to handle campsite reservations quite well. The necessary site descriptions were assembled, all campground reservation holders from the previous two years were contacted, and the system was unveiled Nov. 1, 2013. The transition went very smoothly.

An initiative to introduce new activities and sports to Pipestem's visitors was successful in attracting the attention of visitors and the press. Gaga, murbles, radio control racing, slacklining, disc golf, night disc golf, night golf tournaments, and footgolf were among the park's offerings featured in print and television spots.

An overlook enhancement project using Boy Scout labor was completed. This involved constructing stone pillars and installing connecting beams, leveling the site for easier access, and pruning vegetation to widen the view. Woodsheds were constructed for Cottages 1-13. All Mountain Creek Lodge rooms were outfitted with microwave ovens and small refrigerators. Pipestem staff provided skilled oversight and assistance for projects at Babcock, Camp Creek, Twin Falls and Cabwaylingo.

At Brush Creek Falls, "No Swimming" signs were installed and extensive law enforcement was conducted. In the interest of public safety, a wooden railing was erected overlooking the lip of the falls.

Plum Orchard Wildlife Management Area

The extended clean-up needed from the storms of 2012 was finally completed and included roof replacement on two toilets at the main boat launch area. The dam was cleared of vegetation for safety and compliance purposes. The Wildlife Resources Section continued to make improvements to wildlife plots in recently cleared areas. Area staff worked with the Paint Creek Watershed Association to develop interpretive sites along Paint Creek.

Prickett's Fort State Park

Safety improvements to the area included development of evacuation plans and the implementation of park wide fire suppression upgrades. Road repairs were made in the picnic area. Other maintenance improvements included painting of gates and sign posts throughout the area, installation of frost-free water spigots in the maintenance area, and replacement of flooring and lighting upgrades in the main room of the visitor center.

Seneca State Forest

Ongoing renovations at the fire tower included construction of a woodshed and vault toilet, replacement of the decking and handrail, and replacement of weather-damaged windows and sills. New kitchen sinks were installed in three cabins and wall heaters in the bathhouse were replaced. Twenty-eight signs and posts were refinished. The Seneca Lake Monitoring and Emergency Action Plan was reviewed and revised.

Stonewall Resort State Park

For the 12th consecutive year, the resort attained the AAA-Four Diamond Award. Work continued on the new tennis courts. New crosswalks are being installed at the lodge. The controlled deer hunt was successful as more than 100 deer were harvested. The National Hunting and Fishing Days Celebration continued to be a positive event for the resort and agency alike. Land preparation was completed by the National Guard for the new cottage sites. Working cooperatively with the National Guard and WVDOR, the new cottage road was graded and base stone installed. Plans were prepared for the installation of cottage utilities.

Tomlinson Run State Park

Six buildings were repaired and painted at the group camp. The electric service was upgraded at both shower houses in the campground. A new sewer line was installed in the boat rental building. Old damaged lockers were removed from the men's locker room at the swimming pool and replaced with wooden benches. The maintenance area was cleaned up with 11 tons of scrap metal and old appliances being recycled. A new safety fence was installed on the dam abutments. Storm damage was repaired on one of the picnic shelter restrooms. Major repairs were necessary on one of the park vehicles. The swimming pool pump was removed and had a new impeller installed.

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

After many years of preparation, the Mansion House Museum finally received its new cedar-shake roof. The Point Pleasant Women's Club purchased and donated a water fountain for Tu-Endie-Wei, and the City of Point Pleasant donated the material and labor to build a pad and install the fountain. All of this was done with no cost to the DNR. A new entrance sign, landscaping, and picnic tables were put in place to make the entrance area more inviting to park guests.

Twin Falls Resort State Park

The park activities trailer was renovated to include new laminate hardwood flooring throughout and new subflooring in the living room, hallway, small bedroom and bathroom. Six new windows and a freestanding metal roof were installed and interior painting was completed. Waterline repair and replacement took place in several areas in the park, most notably 3,000 feet of new line installed from the campground to the Pioneer Farm. Approximately 400 feet of waterline were replaced at three cabins and shut-off valves were installed. Roofs were replaced at two cabins and one bathhouse at the campground. Cabin 4 received a new front porch and the exterior was painted. The outdoor pool was revamped for the summer of 2014 in an attempt to increase attendance. This work included: a roofed lounge area with carpet was established at the old snack bar, a solar heating system was created using 4,000 feet of black plastic waterline; and a portable tube slide, large floatable toys, and a basketball goal were purchased. Staff also painted all pool lounge chairs and picnic tables in bright colors. A spray/shower feature was fabricated and will be installed for the 2015 season. The bathroom of Shelter 3 was renovated with new toilet dividers, ceiling, new toilets, and faucets and interior painting.

Underground power repairs were also performed at the Pioneer Farm where 800 feet of conduit and service cable were replaced. Repairs were made in the Foxhunters branch of the campground, restoring electrical service to six electric sites.

A new bridge was constructed at the crossing on the #17 green. This bridge greatly improves the look of the golf course and allows a more natural appearance.

Tygart Lake State Park

After a trial period, the lodge completed the first full year of operation. The winter months of FY14 showed substantial growth over the same period the year before. Extensive renovation and construction were performed to reopen the lakeside swimming area this year. Guests were happy to find a new sand beach, kayak rentals, game courts, restrooms and grilling area. Last year, staff began a multistage plan to remodel the front desk area of the lodge by replacing the countertop and adding a wheelchair-accessible check-in area. Phase two was completed this year and consisted of converting the wood paneled façade to river stone of a color which complements the new countertop. Plans were developed and procurement approval was pending for work to address an insufficient exhaust hood system in the restaurant kitchen, an inoperable HVAC in the restaurant kitchen, and roof leaks affecting several lodge rooms and the gift shop. Nearly half of the lodge room heating/cooling units reached the end of serviceable life and were replaced.

Inmate labor is a vital aspect of maintaining the park and was used in cooperation with park employees for each of the following projects: lodge roof repairs, lodge room decks, cabin playground equipment removal, power line right of way clearing, residence siding repairs, storm cleanup and CO2/smoke detector installation.

Valley Falls State Park

A major water leak by the restrooms was repaired. The parking lot by the railroad tracks was expanded. The park benefited from volunteer projects, including a Boy Scout project to install a culvert under a trail footbridge that was in danger of washing out and an Eagle Scout project to construct a new deck and ADA ramp at the park office. The park foundation purchased two trailers, one to transport chairs for weddings and another for use as a concession trailer. The park hosted more than 80 weddings for the year.

Watoga State Park (includes Calvin Price State Forest)

Park staff completed extensive interior improvements to Cabin 1, varnished floors in 13 modern and standard cabins, varnished all tables and benches in standard and modern cabins, and varnished mantels in most cabins. Repairs to Cabin 21 included jacking up one corner, replacing support logs, subflooring and floor. Flagstone porches on several standard cabins were repaired and water shut-off valves were replaced under many of the standard cabins. All log benches were replaced in the Rec Hall outdoor amphitheater. Posts and railings were replaced on the fence which protects Jesse's Cove Trail hikers from a cliff below the trail. A new log bridge was constructed on the Lake Trail at the upper end of Watoga Lake. Five bear-resistant chain link garbage can enclosures were constructed for the campgrounds. All garbage cans were removed from the individual campsites and placed in these enclosures.

Watters Smith Memorial State Park.

Trail work continued with several of the parks trails being repaired, contoured for erosion and brush cut back. A bike route was built along the Rachel Hershey Trail to help with erosion and issues with mud. Trail use continues to increase. An heirloom vegetable garden was constructed and planted on the park with several West Virginia varieties of vegetables planted. The garden proved to be a very popular addition to the historical tours. Bathrooms within the superintendent's residence and Activity Building were renovated. The park again hosted a JAKES Day event.

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, 2014

- Brush Creek Falls fencing
- Cacapon dam riser gate repair
- Cacapon irrigation dam gate repair
- Cacapon Old Inn electric rewire
- Cacapon Old Inn exterior restoration (Phase 1)
- Camp Creek pedestrian bridges
- Canaan Lodge renovation and guest room wings
- Cass ballast cleanup
- Cathedral storm cleanup
- Chief Logan Lodge HVAC
- Hawks Nest pool repairs
- Tomlinson Run electrical repairs

Design Projects completed as of June 30, 2014

- Babcock Mill roof
- Beech Fork trail & parking improvements
- Berwind Log House package
- Blackwater Falls emergency replacement of 3 utility poles
- Blennerhassett Island Museum HVAC
- Cacapon well pump replacement
- 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 (Phase 2)
- Pipestem HVAC pipes
- Tygart kitchen HVAC and roof repairs

Construction Projects in progress by June 30, 2014

- Beech Fork trail and parking improvements
- Berkeley Springs old roman bath HVAC
- Blackwater Falls sled run snow making system
- Blackwater Falls sled run snow making well
- Blackwater Falls water well drilling services
- Bluestone – Pitts road
- Cacapon cabins water pump ROTO-phase replacement
- Cacapon Old Inn restoration (ongoing)
- Canaan AHU replacement
- Chief Logan Lodge MEP updates/projects
- Stonewall pathways, decorative crosswalks

Design Projects in progress by June 30, 2014

- Beech Fork Lodge
- Blackwater Lodge second floor plumbing and electrical repairs
- Blennerhassett Island boat dock
- Carnifex Sign Shop addition
- North Bend Rail Trail gas line right of way remediation
- Pipestem Lodge fire alarm
- Pipestem Lodge structural
- Pipestem new laundry room and waste water treatment plant
- Watters Smith waste water treatment plant replacement



Wildlife Resources Section



**Wildlife Resources
Section**
Curtis I. Taylor, *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

Outreach

Wildlife Resources 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, sportsmen's clubs, outdoor classrooms, nature tours, fairs, local sports shows, training schools, several County-wide Environmental and Conservation Day events, several Master Naturalists classes, Wildflower Pilgrimage, National Wild Turkey Jakes Day, power companies, and the National Hunting and Fishing Days Celebration. Cooperation was given to universities and colleges by serving as guest lecturers. Thirteen Wildyards were certified for the year. Wildlife Calendar sales were 16,967 wholesale and 2,917 retail. Numerous interviews were given to the TV, radio and print media.

Public meetings were conducted at 12 sites around the state in March 2014 to present proposed regulation changes to hunters and anglers. These meetings also provide the general public an opportunity to make recommendations and ask questions relating to our regulation proposals and our agency's programs.

Staff presented more than 150 classes and lectures and attended more than 100 sportsmen's groups meetings. 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 36,257 visitors and 135 group tours utilized 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.

Staff gave 32 presentations to approximately 2,015 people. Staff also worked at Junior Conservation Camp, wrote and administered the Wildlife Exam for the West Virginia Envirothon, and conducted wildlife training for 30 teachers participating in the Envirothon. Staff presented at the annual West Virginia Science Teachers Association Conference. Personnel edited, proofed, and updated the hunting and fishing regulations in printed format and on the Web. Staff reviewed and coordinated Web updates for the Wildlife Resources Section. 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 publish and distribute the West Virginia Wildlife magazine. The 28-page publication is mailed to 42,000 subscribers with the remaining 2,000 copies distributed to district offices, fairs and schools. The articles are written by DNR employees about the state's wildlife and the programs used to manage them wisely. Lottery proceeds were also used to place advertisements in both electronic media (TV and radio) and print media (magazines and newspapers). The ads promoted hunting, fishing, special events, and the West Virginia Wildlife Center. Staff worked with Commerce Communications/Marketing to develop a major advertising plan for calendar year 2014.



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 West Virginia Outdoors and DNR Report radio programs were broadcast more than 17 MetroNews affiliated stations located throughout the state.

Project WILD provides training for formal and informal educators across the state. In the past year, 143 educators attended eight workshops for Project WILD, Aquatic Project WILD and Growing Up WILD.

The West Virginia Becoming an Outdoors-Woman (BOW) program is continuing to introduce women to outdoor activities. The spring workshop is always well attended with more than 70 participants and the fall workshop had 60 participants, which is always good at a smaller park. The women attended hands-on classes in hunting, fishing, backpacking, canoeing and other outdoor-related skills.

Staff conducted a number of education programs related to plants in West Virginia, including Master Naturalist Program workshops on trees, shrubs and woody vines; wildflowers and weeds; recording, sharing and preserving natural history data; and nature interpretation and teaching with a focus on plants, invasive plants, nature in winter and classification. Other presentations completed in 2013 included poisonous plants, federally threatened and endangered plants, and collecting and documenting vascular plants.

Staff hosted three Diversified Cooperative Training high school students, providing them an opportunity to learn about the kinds of work done by our program in a mentoring and internship program coordinated by the Randolph County school system.

Other program participation included the Blackwater Wildflower Pilgrimage and National Hunting and Fishing Days.

West Virginia Wildlife Endowment Fund

The total market value of the fund at the close of FY 2014 was \$52,488,545.54. During Calendar Year 2013, there were 305 Adult Lifetime Licenses sold, 1,193 Infant Lifetime Licenses sold, and 4,717 Senior Lifetime Licenses sold for a total dollar amount of \$702,365.50.

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 2013, there were 927,069 annual license privileges sold resulting in license revenue of \$15,729,176.

The goWILD! online license sales and the agent electronic point of sale system continue to grow in popularity and the two methods for purchasing a license accounted for approximately 82 percent of license revenues for the 2013 license year.

Hunting and Fishing License Sales By Residency and Class—Calendar Year 2013
Total License Sales

RESIDENT				
Class	Description	Price	Number	Amount
A	Hunting and Trapping	\$19.00	27,181	\$516,439
AH	Apprentice Hunt & Trapp	\$19.00	640	\$12,160
AHJ	Apprentice Junior Hunt & Trapp	\$16.00	459	\$5,049
B	Fishing	19.00	87,037	\$1,653,703
N	Antlerless Deer Hunting	10.00	81,453	\$814,530
BG	Big Game	10.00	3,885	\$38,850
RG	Additional Deer - Firearms	21.00	24,594	\$516,474
RB	Additional Deer - Archery	21.00	19,521	\$409,941
RM	Additional Deer - Muzzleloader	16.00	1,556	\$24,896
X*	Sportsman Hunting/Trapping/Fishing	30.00	99,723	\$2,991,690
XJ**	Junior Sportsman Hunting/Trapping/ Fishing	11.00	7,937	\$87,307
A-1	Small Arms Hunting	8.00	8,660	\$69,279
DS	Bear Damage Stamp	10.00	25,804	\$258,044
O	Trout Fishing	10.00	101,389	\$1,013,890
CS***	Conservation Stamp	5.00	219,329	\$1,096,645
Resident Subtotal			709,168	\$9,508,897

*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.

NON-RESIDENT				
Class	Description	Price	Number	Amount
I	National Forest Hunting/Trapping/ Fishing	\$2.00	14,370	\$28,740
E	Non-resident Hunting/Trapping	119.00	26,760	\$3,184,440
EE	Non-resident Bear Hunting	162.00	1,209	\$195,858
AAH	Non-resident Apprentice Hunt & Trapping	\$119.00	64	\$7,616
AAHJ	Non-resident Apprentice Junior Hunt & Trapping	\$16.00	346	\$5,536
F	Non-resident Fishing	37.00	12,122	\$448,514
H	Non-resident Small Game Hunting - 6 day	27.00	863	\$23,301
LL	Non-resident Fishing - 1 day	3.00	47,187	\$141,561
NN	Non-resident Antlerless Deer	27.00	16,680	\$450,360
RRG	Non-resident Additional Deer - Firearms	43.00	4,782	\$205,626
RRB	Non-resident Additional Deer - Archery	37.00	2,028	\$75,036
RRM	Non-resident Additional Deer - Muzzleloader	37.00	202	\$7,474
UU	Non-resident Archery Deer	32.00	6,196	\$198,272
VV	Non-resident Muzzleloader Deer	32.00	1,904	\$60,928
WW	Non-resident Turkey	32.00	3,764	\$120,448
XXJ	Non-resident Junior Sportsman	16.00	2,174	\$34,784
A-1	Small Arms Hunting	8.00	1,321	\$10,569
DS****	Bear Damage Stamp	10.00	1,501	\$15,006
OO	Trout Fishing	16.00	14,050	\$224,800
J*****	Small Game Shooting Preserve Hunting - 6 day	10.00	1,168	\$11,680
CS/LE	Non-resident Conservation / Law Enforcement	13.00	59,210	\$769,730
Non-resident Subtotal			217,901	\$6,220,279

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

***** Available through goWILD! Online only

Grand Total Resident + Non-resident Sales	927,069	\$15,729,176
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Hunting and Fishing License Sales By Class — Calendar Year 2013

Lifetime Agent License Sales

ADULT

Class	Description	Price	Number	Amount
Adult				
A-L	Hunting and Trapping	\$782.00	1	\$782
AB-L	Hunting, Trapping, and Fishing	\$805.00	204	\$164,220
A-1-L	Small Arms Hunting	\$75.00	17	\$1,275
B-L	Fishing	\$552.00	18	\$9,936
O-L	Trout	\$230.00	65	\$14,950
Adult Subtotal			305	\$191,163

INFANT

Class	Description	Price	Number	Amount
Infant				
A-L-I	Hunting and Trapping	\$391.00	-	-
AB-L-I	Hunting, Trapping, and Fishing	\$402.50	879	\$353,797.50
B-L-I	Fishing	\$276.00	20	\$5,520.00
O-L-I	Trout	\$115.00	294	\$33,810.00
Infant Subtotal			1,193	\$393,127.50

SENIOR

Class	Description	Price	Number	Amount
Senior				
A-1-L	Small Arms Hunting	\$75.00	3	\$225.00
XS	Hunting and Trapping	\$25.00	4,714	\$117,850.00
Senior Subtotal			4,717	\$118,075.00

Grand Total Lifetime Sales			6,215	\$702,365.50
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Capital Improvements

The Wildlife Resources Section 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 Stamp 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 two parcels of land in for fishing and boating access to the Elk River in Kanawha County (5 acres total)
2. Purchased of 638 acres to create the Fairfax Pond-Rehe Wildlife Management Area Preston County.
3. Purchased of 144 acres to increase the size of Wallback Wildlife Management Area in Clay County.
4. Purchased of 112 acres to increase the size of Bluestone Wildlife Management Area in Summers County.
5. Purchased 95 acres to increase Camp Creek State Forest, Mercer County.
6. Purchased 74 acres to increase Meadow River Wildlife Management Area, Greenbrier County.
7. Purchased 59 acres to increase Lewis Wetzel Wildlife Management Area, Wetzel County.
8. Purchased 57 acres to increase Thorn Creek Wildlife Management Area, Pendleton County.
9. Completed construction of new public boating access facilities on the Guyandotte River near the mouth of Horse Creek, Wyoming County.
10. Completed upgrading of the public boating access facilities on the Guyandotte River at Salt Rock, Cabell County;
11. Completed construction of new public shooting range at Dents Run Wildlife Management Area in Marion County.

West Virginia's Archery in the Schools Program

When the school year begins in the fall of 2014, students from 300 schools around the state will be participating in the Division of Natural Resources (DNR) West Virginia Archery in the Schools (AIS) Program. The DNR began the pilot program in the fall of 2004 with 19 schools and in the nine years since has exceeded all expectations. In fact, this interest has allowed DNR to host trainings in every region of the state, reaching more than 700 physical education teachers. 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 nine annual state archery tournaments. This year the Annual Archery in the Schools State Qualifying Virtual Tournament was held with more than 837 students from 47 schools participating. Of these students, 468 students from 25 schools participated in the state tournament. West Virginia had 15 schools participate in the National Archery in the Schools Tournament in Louisville, Kentucky, and three schools participated in the World Tournament held in Madison, Wisconsin.

The AIS Program has become the DNR's largest and fastest growing educational program – reaching an estimated 85,000 students in the past nine years. The DNR, along with the Department of Education and wildlife organizations, has been able to introduce students grades 4-12 to 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. West Virginia's DNR received national attention when the West Virginia Schools for the Deaf and Blind (WVSDb) 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 a million family style meals to the state's hungry. In 2013, generous hunters donated 681 deer (23,866 pounds of nutritious meat providing more than 27,000 family style meals). Deer processing and transport costs for the HHH Program in 2013 was \$34,605.70, which was offset largely in part with donations from the West Virginia Department of Health and Human Resources, the Greater Kanawha Valley Foundation, Share the Harvest Sunday fundraiser, Governor's One Shot Deer Hunt fundraiser, 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 to continue.

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 15,000 wildlife enthusiasts are in attendance to try their hand at everything from archery, shooting, fly-fishing and a kids fishing derby, to list only a few. In addition, attendees also have 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 (NH&FD). 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 to participate only 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

The Wildlife Resources Section, Game Management Unit, conducts management activities on 89 Wildlife Management Areas (WMAs) and eight state forests totaling 436,446 acres. Acquisition of public land and wetlands is a high priority of the Section. Additions were made to four WMAs totaling 333 acres and one new WMA, Fairfax Pond-Rehe WMA (637 acres), was established in 2013-2014.

In addition to the 89 WMAs an extensive wildlife management program is conducted on nearly 1.1 million acres of national forest land 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 opportunity areas, 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.

Management on the 89 WMAs is directed toward improving wildlife habitat. Timber management was conducted on 893 acres with additional timber sales in the planning stage. 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 1,359 trees and shrubs for food and cover and pruning, releasing, and/or grafting more than 315 individual trees and shrubs.

More than 2,471 acres of wildlife clearings were mowed and 51 acres of new clearings were established. Lime and/or fertilizer were applied to 426 acres, and 514 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 146 acres. Herbicide was used on 242 acres to control undesirable/invasive vegetation. Sharecropping agreements with local farmers were executed on 1,515 acres to maintain open land habitat. Sixty-nine waterholes were maintained to provide a year-round water supply for wildlife.

Water levels on 219 acres of wetlands were manipulated to encourage waterfowl utilization. Three hundred and twenty-five waterfowl nest structures were maintained. Thirty-nine nest structures were maintained for other wildlife species.

More than 836 miles of roads and trails and 15 bridges were maintained. Road closures were installed or maintained at 557 sites to prevent disturbance to wildlife and to protect wildlife habitat.

Numerous information and regulation signs were erected or maintained. Four hundred and 47 campsites, 28 boat ramps, 27 shooting ranges, 22 physically-challenged hunter access roads, seven angler access sites, and 181 parking areas were maintained. One new shooting range was developed.

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

Wildlife Damage and Nuisance Activities

Thirty-nine nuisance bears were destroyed, eight 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.

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.

Environmental Reviews

Wildlife biologists reviewed numerous projects that potentially impact wildlife and its respective habitat. Primary concerns are road construction, stream alteration, 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 projects, thus reducing detrimental impacts on wildlife.

Wildlife Population Surveys and Research

Waterfowl surveys (7) and census routes for woodcock (25) were conducted in cooperation with the U.S. Fish and Wildlife Service. Surveys were also conducted for bald eagles (7) and song birds. Three hundred and eighty-seven (387) mourning doves and 547 Canada geese were banded.

Harvest and biological data were compiled for hunter-killed turkey, beaver, bobcat, fisher, deer, bear and wild boar.

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 1,500 staff days were spent providing technical assistance to private individuals and landowners in 2013-2014.

Regional, National and International Coordination

Many of the challenges and issues facing the Wildlife Resources Section'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 Wildlife Resources Section 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 2013, hunters harvested 150,877 deer in the combined deer seasons. This is a 14 percent increase from the 2012 harvest and 9 percent more than the previous five-year harvest average of 138,713. The combined deer season harvest for 2013 is the 17th largest total deer harvest on record for West Virginia. The 2013 total deer harvest represents one deer killed for every 97 acres of deer habitat in the state, and a 41 percent harvest decrease from the record harvest of 255,356 deer in 2002. From 1945 through 2013, 5,891,325 deer have been recorded as harvested in West Virginia. Sixty percent (3,515,320) of the total recorded deer harvest of the past 68 years has occurred in the past 20 years.

Hunters took 1,043 deer in the special urban deer season in 2013. This special archery deer hunting season is available to incorporated cities and homeowner associations, which may open three weeks prior to the opening of the statewide deer archery season. During this special season, seven deer may be taken which do not count toward the regular archery deer season bag limit. In 2013, 13 cities (Alderson, Barboursville, Bethlehem, Bridgeport, Charleston, Harpers Ferry, Harrisville, Morgantown, North Hills, Parkersburg, South Charleston, Weirton and Wheeling) reported harvesting 800 deer. In addition, 243 deer were harvested during urban deer archery hunts conducted by eight homeowner associations.

Efforts to control the spread and monitor chronic wasting disease (CWD) in free-ranging deer in Hampshire and Hardy counties by DNR, landowners and hunters are ongoing. In the 2013 deer seasons, samples from 591 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. Twenty-nine samples were found to have the abnormal protein associated with CWD. CWD has now been detected in 159 deer in Hampshire County and three 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.

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 implemented and an active 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.

Black Bear

West Virginia hunters harvested 2,692 black bears during the combined 2013 archery and firearms seasons. This is the fourth time the kill has topped 2,000 in the past five years. The harvest of 2013 was 2 percent lower than the 2012 record harvest of 2,735 bears and is the second highest harvest on record.

One-hundred seventy-five 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 4 percent from the 183 non-hunting mortalities recorded in 2012. The combined seasonal and non-seasonal deaths (2,867) is the second largest recorded in West Virginia.

Wild Turkey

The 2013 spring gobbler harvest was 11,162 birds, which was 34 percent greater than the 2012 harvest and 14.7 percent more than the 5-year average. Spring gobbler season began in 1966 on our WMAs and went statewide in 1968. Of those 48 seasons, the 2013 harvest ranks 14th overall and is by far the highest in the past seven years.

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 2013 were down slightly from the previous year.

Wild Boar

Hunters killed 49 boars during the 2013 season. This is slightly lower than the harvest of 62 in 2012. Acorns in the boar areas were very sparse, but hickory nuts were fairly plentiful in certain areas. With unfavorable oak mast conditions, boars should have been concentrated in areas with available mast leading to a higher harvest; however, the hunting conditions were not as favorable as in 2012 (i.e., spotty mast conditions and ideal weather). West Virginia hunters who preseason scouted and located high mast producing areas were more successful in harvesting wild boars this season.

Ruffed Grouse

A total of 14 cooperators from all four ecological regions submitted envelopes for the 2013–14 grouse season. They reported on 218 hunting trips, which is down 26 percent from the 2012–13 season. On these hunting trips, which included other party members, 280 hunters spent 1,022 hours hunting, shot at 395 grouse, and took 121 of them home. Examining this table over the course of the past 20 years reveals that while the number of cooperators and their hunting partners has declined significantly, the amount of time and number of birds they get a chance to shoot at has not. In 1993, the number of hours spent hunting by party member was 3.9; last year it was 3.7; on their trips, hunters in 1993 shot at 0.3817 grouse per hour; in 2013 they shot at 0.3865 per hour. Flushing rates have remained relatively poor over the past 20 years with hunters flushing 1.6 and 1.3 birds/hour in 1993 and 2013, respectively. The 20 year average flush rate is 1.2 and last year cooperators exceeded that by 8 percent.

Annual Mast Survey

Annually during August, cooperating personnel in the Division of Natural Resources 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 2012 survey, the 2013 mast index for all species combined was similar, but the composition was different. The range in fluctuation depended on species with all oak mast species decreasing substantially. This decrease ranged from a low of 28 percent for scrub oak to 74 percent for chestnut oak. White and black/red oaks decreased greater than 50 percent. This year's index for beech was the third highest since the mast survey started in 1971, increasing 186 percent above 2012. Hickories and walnut increased 51 and 52 percent, respectively. Among soft mast species, black cherry showed the greatest increase being 79 percent above last year's index. Crabapple and apple fared equally well increasing 77 and 76 percent, respectively. Greenbrier essentially remained the same increasing only 5 percent. Of the soft mast species, sassafras decreased the most from 2012 (29 percent).

WARMWATER FISH MANAGEMENT

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) and outreach and information development, providing the public with material concerning fishing, and fish management programs.

2012–2013 Warmwater Stocking

Muskellunge

More than 1,300 fingerling muskies were stocked into the Buckhannon, Coal, Guyandotte, Meadow, Mud and Tug Fork rivers. More than 1,100 advanced fingerling muskies were stocked into Bear Rocks, East Lynn, Mason, North Bend, Stonecoal, Stonewall Jackson, Upper Mud and Woodrum lakes. 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 2013.

Walleye

More than 69,000 walleye fingerlings were stocked into the Greenbrier, New, and Ohio rivers as well as the Cheat and Stephens lakes. Charles Fork Lake, Dog Run Lake, Greenbrier River, and the Ohio River received 3,700 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 119,000 channel catfish fingerlings reared at Palestine and Apple Grove hatcheries were stocked into 30 waters. More than 59,000 advanced fingerlings were stocked into 42 small impoundments and nearly 3,000 catchable-size channel catfish were stocked into 19 waters in 2014 to provide enhanced family recreational fishing opportunities at many 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, Wallback and Wirt County lakes.

Hybrid Striped Bass

More than 173,000 hybrid striped bass fingerlings were released into the Monongahela and Ohio rivers and into Beech Fork, Bluestone and R.D. Bailey lakes. More than 7,000 hybrid striped bass were stocked into Dixon, Dunkard Fork, and Rollins lakes and the West Fork River in 2014. Hybrids more than 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 66,000 striped bass fingerlings were stocked into Bluestone Lake and the Ohio River. Additionally, Mount Storm Lake received more than 4,000 advanced fingerling striped bass.

Black Bass

More than 35,000 largemouth bass fingerlings were stocked into Barboursville, Cacapon State Park, Kanawha State Forest, Lick Creek, McClintic, Millers Fork, Rockhouse, Underwood and Wirt County lakes and the Ohio River.

Blue Catfish

More than 119,000 blue catfish fingerlings were stocked into the Kanawha and Ohio rivers and R.D. Bailey Lake as part of efforts to restore 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 completed in 2009.

WARMWATER PROJECTS

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.

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 2013. 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, and fish health surveys conducted at North Bend and Upper Mud River lakes.

Fish Health Surveys

Fish health assessments are increasingly important components of fisheries management. Fish health surveys were conducted for largemouth bass and sauger from the Belleville and Racine pools of the Ohio River. Largemouth bass virus was not detected in black bass collected from these pools in 2013. Largemouth bass virus has been detected in previous samples. 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.

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 Asian carp presence in the river.

Habitat Enhancement

Fisheries management staff continued habitat enhancement projects in 2013. The agency continued the long-running and successful fish attractor project in large lakes. Recycled Christmas trees were placed as attractor structures in Beech Fork, East Lynn, Mount Storm, Sutton, Stonecoal and Tygart lakes.

Catfish spawning boxes were installed at Stonecoal and Tygart lakes. Staff also installed fish spawning and nursery habitat structures in Kimsey Run, New Creek and South Mill Creek lakes.

Fishing Tournament Coordination

Data on 2013 catch rates and fishing efforts during 640 organized fishing tournaments were collected from 19 bass clubs and 94 open tournament sponsors. Tournaments were held at 36 West Virginia water bodies, including 381 on lakes, 40 on the Kanawha River, 29 on the Monongahela River, and 177 on the Ohio River. Tournament fishing pressure at 140,089 hours was 1 percent higher than in 2012, the previous highest year. When comparing 2013 results to 2012, average tournament catch rates were 10 percent higher, at 0.22 fish per angler-hour, and the highest in 39 years of tournament record keeping.

Trophy Fish Citation Program

The Trophy Fish Citation program recognized anglers who caught 690 fish, representing 25 species that qualified as trophies in 2013. Of 14 waters (private lakes are counted as one) yielding 10 or more fish citations, 73 percent were from streams and rivers, 4 percent from small public fishing lakes, 12 percent from private lakes and ponds, and 11 percent from large public lakes. The trophy citation program began in 1976 and has recognized 58,466 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 2013, 390 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 .

2013–2014 Warmwater Stockings

Species and Hatchery/Source	Number	Size	Location
Blue Catfish	119,256	fg	R.D. Bailey Lake; Kanawha and Ohio rivers
Bluegill	163	ad	
Channel Catfish	2,954	ad	Anawalt, Berwind, Cacapon S.P., Cedar Creek S.P., Chief Logan S.P., Coopers Rock S.F., Edwards Run, Fort Ashby, French Creek, Handley, Krodel, Laurel, Little Beaver S.P., Mason, Mountwood, North Bend S.P., Pipestem S.P., Tomlinson Run SP and Watoga S.P. lakes
Channel Catfish	119,517	fg	Anawalt, Berwind, Big Ditch, Charles Fork, Chief Cornstalk, Chief Logan S.P., Conaway Run, Curtisville, Dog Run, Elk 2 Mile, Horse Creek, Huey Run, Hurricane, Krodel, Laurel, Little Beaver S.P., McClintic, Mountwood, North Bend, Pennsboro, Pipestem S.P., Plum Orchard, Rockhouse, Stonewall Jackson, Tracy, Tuckahoe, Turkey Run, Underwood, Upper Mud and Wallback lakes
Channel Catfish	59,266	af	Anderson, Barboursville, Bear Rocks, Berwind, Big Ditch, Big Run, Brushy Fork, Castleman Run, Chief Cornstalk, Conaway Run, Coonskin, Curtisville, Dog Run, Elk Fork, Fort Ashby, Horse Creek, Huey Run, Hurricane, Indian Rock, Krodel, Larenim, Laurel, Lick Creek, Little Beaver S.P., Logan Co. Airport, Middle Wheeling Creek, Millers Fork, Newburg, Pennsboro, Pettigrew, Pipestem S.P., Right Fork Frozen Camp, Rockhouse, Saltlick # 9, Teter Creek, Turkey Run, Tracy, Underwood, Upper Cove, Wallback and Wirt Co Farm lakes
Hybrid Striped Bass	173,043	fg	Beech Fork, Bluestone and R. D. Bailey lakes; Monongahela and Ohio rivers
Hybrid Striped Bass	7,137	af	Dixon, Dunkard Fork and Rollins lakes; West Fork River
Largemouth Bass	34,629	fg	Barboursville, Cacapon S.P., Kanawha S.F., Lick Creek, McClintic, Millers Fork, Rockhouse, Underwood and Wirt County lakes; Ohio River
Muskellunge	17,500	fy	Tomlinson Run S.P. Lake
Muskellunge	1,364	fg	Buckhannon, Coal, Guyandotte, Meadow, Mud and Tug Fork rivers
Muskellunge	1,233	af	Bear Rocks, East Lynn, Mason, North Bend, Stonecoal, Stonewall Jackson, Upper Mud and Woodrum lakes
Striped Bass	4,341	af	Mount Storm Lake
Striped Bass	66,667	fg	Bluestone Lake; Ohio River
Walleye	558,360	fy	East Lynn Lake
Walleye	3,700	af	Charles Fork and Dog Run lakes; Greenbrier and Ohio rivers
Walleye	69,101	fg	Greenbrier, New and Ohio rivers, Cheat and Stephens lakes
		ad = adult af = advanced fingerling fg = fingerling fy = fry	

COLDWATER FISH MANAGEMENT

In 2013-14 selected waters in West Virginia were stocked with 1,032,246 trout weighing 634,296 pounds. Inadequate rainfall during fall 2013 did not allow normal transfers to occur from Reeds Creek and Spring Run Hatcheries to other state hatcheries, and along with the extended colder than normal winter, this resulted in poor growth rates at all hatcheries. As a result the overall size of trout stocked in 2014 was 1.6 fish per pound. A breakdown of trout production by facility follows.

The seven state-owned hatcheries produced 626,138 pounds of trout in 2013-14. Except in years when production is affected by conditions such as drought 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 less than this reflects unusual situations.

The federal hatchery at White Sulphur Springs provided 8,158 pounds of trout during 2013-14. This is the only federal hatchery remaining in West Virginia. The poundage of trout currently being provided is less than has been provided historically from this facility, but is representative of expected trout poundage because of changes in hatchery operations at White Sulphur Springs. Other anticipated operational changes at the hatchery may further reduce the poundage available for stocking.

The 2013 fall stocking totaled 32,923 pounds. This is within the targeted poundage range of normal fall stockings. Thirty-three waters received two stockings each during a two-week period in October. 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 two major parts of this program involve 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 2013-14, a total of 315,295 fingerling trout were stocked in 54 waters. Of these, 141,075 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 105,200 surplus rainbow fingerlings were stocked in Stephens Lake of Raleigh County in an attempt to establish a two story fishery. The wild trout program provides thousands of anglers with year-round recreational opportunities in areas of West Virginia previously lacking such angling opportunities.

2013-14 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
Fall 2013										
Spring Run	6,359	12,937	662	1,349					7,021	14,286
Petersburg	10,891	20,126	306	204					11,197	20,330
Bowden	7,460	7,732					930	606	9,045	5,951
Reeds Creek	4,510	2,880	390	282					4,900	3,162
*White Sulphur	400	200							400	200
Sub-Total	29,620	40,875	1,358	1,835			930	606	32,923	43,929
Spring 2014										
Spring Run	115,642	164,735	13,235	19,395	26,404	34,940	4,538	6,618	159,819	225,688
Petersburg	19,214	25,549	1,090	1,108					20,304	26,657
Edray	40,733	79,384	2,543	4,997	1,025	3,068	4,057	8,436	48,358	95,885
Ridge	18,360	29,966	1,788	2,979	28,854	41,739			49,002	74,684
Tate Lohr	22,844	44,779	1,523	2,773					24,367	47,552
Reeds Creek	113,960	190,249	2,901	4,721	39,869	64,780	5,218	9,147	161,948	268,897
Bowden	103,169	199,568	1,290	2,617	18,142	31,730	7,216	13,404	129,817	247,319
*White Sulphur	7,758	1,635							7,758	1,635
Sub-Total	441,680	735,865	24,370	38,590	114,294	176,257	21,029	37,605	601,373	988,317
TOTAL	471,300	776,740	25,728	40,425	115,309	176,870	21,959	38,211	634,296	1,032,246

*Federal Hatchery

WILDLIFE DIVERSITY PROGRAM

Endangered Species Program

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 15 sites to obtain data on the distribution and population trends of this rare mammal. During this fiscal year, nine northern flying squirrels were captured at three sites in fall 2013 and 10 squirrels were captured at three sites in spring 2014. Scat and hair samples were collected and 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, 26 northern flying squirrels were captured by consultants, U.S. Forest Service (USFS) biologists, and the graduate student. 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.

Endangered Bats

White-nose Syndrome (WNS), a condition that has killed more than 5 million 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 2013-14, winter bat surveys were conducted in 19 caves to monitor populations of hibernating endangered bats (Indiana bat and Virginia big-eared bat). During these surveys, all bats present were counted. All sites visited were WNS positive. While at these sites, Program personnel assisted researchers from several institutions with White-nose Syndrome studies by collecting samples needed for their research projects. Because WNS can possibly be spread by people visiting caves, biologists conducting bat surveys followed disinfection protocols developed by the US Fish and Wildlife Service (USFWS) to clean gear and clothing between cave trips.

Surveys at 40 West Virginia caves pre- and post-WNS documented the following population declines in cave-dwelling bat species: little brown bat, 96.3 percent; Indiana bat, 80.1 percent, northern long-eared bat, 90.7 percent, tricolored bat, 87.2 percent; and big brown bat, 8.2 percent. Two species have exhibited population increases in recent years: eastern small-footed bat, 8.3 percent; and Virginia big-eared bat, 39.2 percent. Virginia big-eared bats, which occur in caves where other species of bats are declining, do not appear to be affected by WNS. To date, no Virginia big-eared bat has been observed exhibiting the classic symptoms of WNS.

In June 2014, 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 (8,354 individuals) was up 5.3 percent over the 2013 count and is the highest count on record. In addition, later in the summer, 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. These data also suggest that, unlike other cave bat species, Virginia big-eared bats are not being impacted by White-nose Syndrome.

To gather data on the distribution and abundance of bats across the state and to document population changes caused by WNS, the WVDNR and USFS began establishing bat monitoring routes across the state in 2009. In summer 2012, 77 routes were run, most three times, 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. Assistance in conducting acoustic surveys has been provided by USFWS, West Virginia Division of Highways, The Wilds, National Park Service, and the caving community and other volunteers. In 2013, Myotissoft, LLC was contracted to analyze the first four years of acoustic survey data; this work has been completed and analysis of the 2013 data is ongoing at this time. Data 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.

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. A meeting was held in early 2014 to review data collected in 2013 and to revise reporting criteria.

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 2013, the Indiana bats using this roost were captured and banded so they can be identified in subsequent years.

The USFWS is currently proposing to list the northern long-eared bat as endangered due to population declines resulting from WNS. Because this was a common species pre-WNS, the WRS had little data on this bat in the Program's databases. Working together, WRS and USFWS biologists compiled data on all northern long-eared bat captures in West Virginia between 2011 and 2013 as well as all records of this bat observed during winter surveys of hibernating bats.

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.

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.

Flat-spined Three-toothed Land Snail

Wildlife Resources Biologists assisted the WV Division of Forestry (WVDof) in developing a timber sale on Coopers Rock State Forest that would protect the threatened flat-spined three-toothed land snail which occurs in the area (i.e., buffer zones around known and potential habitat). Data loggers were placed in the proposed timber sale area to collect pre-treatment data to evaluate the impacts of timber harvest buffer zones on the snail's habitat. Logging was conducted in early 2012, and to collect two years of post-treatment data, temperature loggers were deployed in May 2012 and again in May 2013 to gather temperature data following the timber harvest. Data loggers were retrieved in fall 2013, and the data were downloaded.

A significant amount of habitat for this species was acquired this year in what will be called the new Cheat Canyon Wildlife Management Area. The area is located on both sides of the Cheat River upstream of the existing Snakehill Wildlife Management Area

Diamond Darter

The diamond darter is a rare fish extant only in a portion of the lower Elk River in West Virginia. The WRS received no funding for this species this fiscal year. Captive propagation attempts by Conservation Fisheries, Inc. continued using fish collected previously, but were unsuccessful.

Allegheny Woodrats

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

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 were assisted with the management and conservation of rare species on their lands. Television spots, newsletter articles, and other outreach projects were undertaken to promote awareness of the state's rare, threatened, and endangered species and of White Nose Syndrome. Program biologists participated in regional and national workshops and biweekly conference calls addressing White Nose Syndrome. The last field season for the WV land snail atlas project was completed in summer 2014; the resulting publication will be available in 2015.

Ornithology

American Kestrel

American kestrels, though common range-wide, 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. Partners have continued to deploy and monitor these boxes in 2014.

Bald Eagle

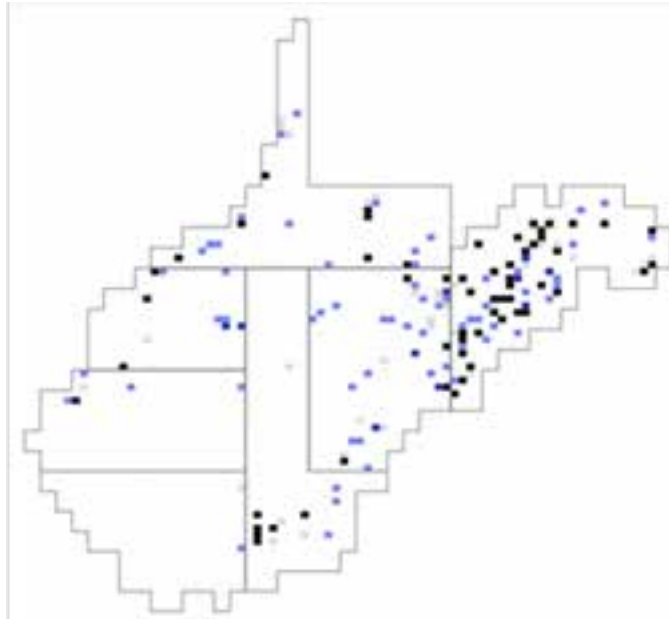
Staff and volunteers monitored 53 (versus 34 in 2013) bald eagle nest sites in 2014 in Cabell, Grant, Greenbrier, Hampshire, Hancock, Hardy, Jackson, Jefferson, Mineral, Monongalia, Morgan, Pendleton, Pocahontas, Raleigh, Summers, Taylor, Tucker, Tyler and Wood counties. Due to continued increases in the number of nests, WRS staff and volunteers are generally now monitoring nests once per breeding season to assess activity and productivity. Eight new nests were documented in 2014 (versus 4 in 2013) in Grant, Greenbrier, Hancock, Pendleton and Summers counties.

Of the 53 nests monitored, 40 were active (versus 31 confirmed active in 2013) and an additional seven 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 40 active sites, 28 nests fledged at least one young, three nests failed, and nine were monitored during incubation and/or brooding but we were not able to assess productivity.

There were numerous reports in 2014 of non-breeding birds statewide. The southern West Virginia winter eagle survey was held Jan. 11, 2014, and 14 bald eagles of various ages were located.

Bald eagles continue to recover, and recent breeding season observations in the 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 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.



Preliminary WV Breeding Bird Atlas Results for Bald Eagle.

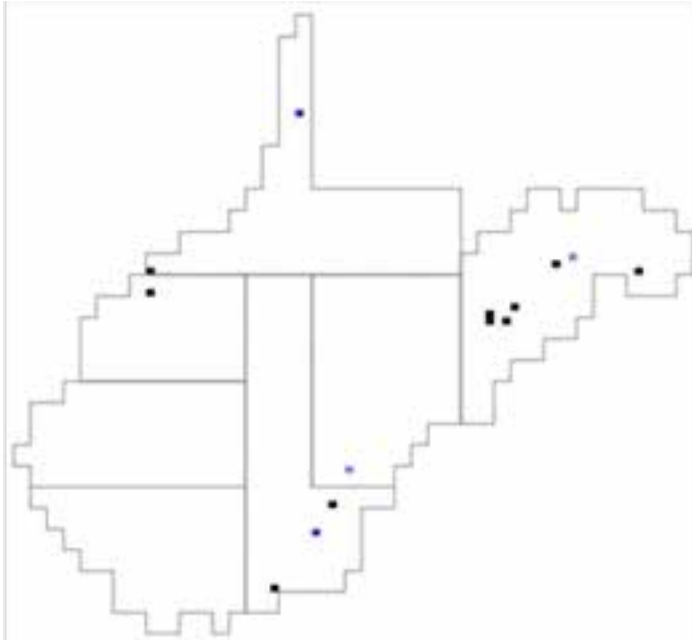
Barn Owl

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.

During the 2014 breeding season, barn owls were observed in WRS nest boxes at four sites in Jefferson and Wood counties. Additional evidence during breeding season includes a sight observation by WRS staff in Hampshire County; a bird observed in Whitmore park in Morgantown; and pellets found in barns and silos in Greenbrier, Jefferson and Pendleton counties.

WRS staff mounted two new nest boxes in Jefferson County. These will be monitored for activity in 2015 and additional nest boxes will be deployed.

Barn owls and/or pellets were observed at four sites in winter 2014 in Greenbrier, Hardy and, Tucker counties.



Preliminary WV Breeding Bird Atlas Results for Barn Owls.

Breeding Bird Survey

Staff and volunteers ran 50-stop 25-mile BBS routes statewide. The Breeding Bird Survey is coordinated by the USGS and is a primary tool for monitoring bird population trends nationwide and guiding conservation and management decisions.

Christmas Bird Counts

Staff coordinated and supported three counts and participated in local counts statewide. It is a winter counterpart to the Breeding Bird Survey as a tool for tracking wintering bird distribution and abundance trends.

Eurasian Collared-dove

The Eurasian collared-dove is a non-native bird rapidly colonizing the southern and central U.S. In 2013, WRS staff responded to reports and confirmed the presence of this species in Union and Monroe County. The species successfully bred in 2013 in Union and continues to be present in the area in 2014. In 2014, at least one collared-dove was spotted to the north in Lewisburg.

Golden-winged Warbler

WRS staff and partners worked to implement the USDA-sponsored “Working Lands for Wildlife” program. This program targets small landowners for creation of early-successional habitat suitable for the fast-declining species. In 2015, staff will work to increase landowner outreach and awareness of the program.

- Staff conducted 25 site visits
- 34 contracts are currently active
- 3 contracts were completed
- Staff partnered with WVDOF, NRCS, NWTF, and WVU staff on project coordination and implementation

Additionally, staff and contractors conducted intensive surveys with playback for golden-winged warbler during the 2014 field season. These surveys focused on Greenbrier, Nicholas, Pocahontas, Preston, Randolph and Tucker counties. Breeding birds were regularly located on timber harvests on Mead-Westvaco and Plum Creek lands and on shrubby pasture margins in agricultural areas nearby. We have confirmed that very few birds breed in Preston County and those that do are most likely to be found on reclaimed strip mines. Golden-winged warblers were also found at one site above 2200' elevation near Baileysville in Wyoming County. All birds located in 2014 were on sites greater than 2000 feet elevation.

Finally, staff provided ongoing assistance as-needed to research being conducted by WVU staff and graduate students.

Loggerhead Shrike

Staff monitored 17 historic/recently-active and two new loggerhead shrike sites in 2013 in Grant, 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. This species 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 2014 in Grant, Greenbrier, Hardy, Jefferson, Monroe, Pendleton and Pocahontas counties. Shrikes were observed at six of these sites. Breeding pairs were located at all six of these sites and successfully fledged at least two young (follow-up visits to assess productivity were limited during the 2014 field season due to breeding bird atlas obligations). Productivity remains very low, with no pair fledging more than two young.

Non-breeding birds (late winter, early spring and late summer) were detected in 2014 in the Old Fields areas of Grant and Hardy counties and at multiple sites in the Greenbrier Valley.

Staff continued to work with partners from nearby states and Ontario, Canada in the creation of a loggerhead shrike working group. Staff worked with partners to refine drafts of 2- and 5-year plans to coordinate and guide work with this species between partners. Staff and partners also worked to refine draft banding and survey/monitoring protocols. In fall 2014, staff will be co-leading a working group meeting as part of the SE/NE Partners in Flight conference in Virginia Beach, Virginia.

Finally, staff from WRS and VADGIF also received training in March 2014 in West Virginia and Virginia on methods to safely trap and band loggerhead shrikes. As part of this training, 10 shrikes were located and trapped in West Virginia. All birds were banded with color bands to enable field identification of individuals. In addition, feather samples were obtained that will answer crucial questions pertaining to subspecies status and fitness of West Virginia birds. This banding effort has already enabled staff to confirm that wintering and breeding shrikes in West Virginia are generally not the same birds. Staff conducting follow-up visits in late April 2014 to sites where banding occurred noted unbanded shrikes at all sites but one, where a banded individual remained on-site with an unbanded mate.

Staff will continue to trap unbanded birds in 2015 as part of an international partnership across eastern states and Canada. All banding will conform to the same protocol and will be directed by a regional coordinator.

Northern Harrier

WRS and USFWS staff confirmed successful breeding for the first time in West Virginia in 2013 near the refuge visitors center. Due to staff changes at the refuge, the breeding site was not closely monitored in 2014. Regardless, multiple breeding season reports suggest a continued presence. Birds continue to be observed in the valley to the north of the visitor's center, perhaps indicating additional breeding activity. Staff worked with Canaan State Park staff on routing a new trail.

Northern Goshawk

Northern goshawk is a poorly understood and rare breeder in West Virginia's mature high elevation forests. During the 2014 field season, four goshawks (including one pair) were observed in Preston and Tucker counties. WRS staff will be conducting transect surveys for breeding goshawks in coming years to better understand abundance and habitat.

Northern Saw-whet Owl

Northern saw-whet owl is a tiny owl found in West Virginia in high elevation spruce/northern hardwood forest and bog/wetland edges. During the 2014 field season, staff and volunteers located owls at four sites in the Williams River and Spruce Knob areas. Habitat included mature red spruce and a red pine plantation.

These added to other sites already known to be occupied. We suspect that the true scope of the breeding population in West Virginia has been underestimated. WRS initiated a nest box program about 10 years ago, but little has been done since. Work with northern saw-whet owl will likely not be a high priority in coming years.

Olive-sided Flycatcher

Olive-sided flycatchers have always been rare and local breeders in open, high-elevation wetlands in West Virginia. In recent years, this species has been considered extirpated. The first West Virginia Breeding Bird Atlas, 1983 - 1989, noted birds at only three sites and successful breeding was never confirmed. In May 2013, two birds, ostensibly a pair, were located at the Cranberry Glades botanical area in Pocahontas County. WRS staff monitored these birds on three separate dates. Despite significant effort, no breeding activity was noted. The birds were still present in mid-July 2013.

Staff and volunteers conducted follow-up visits during the 2014 field season and successfully located two breeding pairs at the same location. During these visits, we were able to confirm that at least five young were successfully fledged. Staff will coordinate with USFS staff in coming years to conduct additional surveys at nearby sites with suitable habitat.

Peregrine Falcon

Peregrine falcons were observed at two known breeding sites in Mason and Pleasants counties. In addition, a pair of falcons successfully bred on the structure of the New River Bridge.

Outside of breeding season, falcons were observed at sites in Grant, Jefferson and Summers counties.

Swainson's Warbler

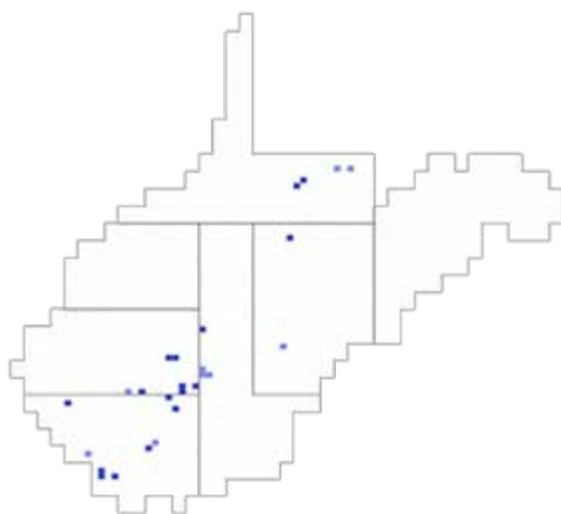
Swainson's warbler is a habitat specialist found in dense woody thickets with abundant leaf litter under a mostly closed to closed canopy. Those occurring in West Virginia are part of a larger disjunct population occurring in the southern Appalachian plateau region. Habitat most frequently consists of a thick rhododendron understory with a deciduous or eastern hemlock overstory. However, interesting exceptions to this have been noted, particularly in the coalfields and the western margins of the species range in West Virginia. Swainson's warbler is potentially highly vulnerable to large-scale habitat alteration due to mining and other activities within the core of its range in West Virginia. Better

understanding of its distribution and abundance will help inform management and conservation decisions.

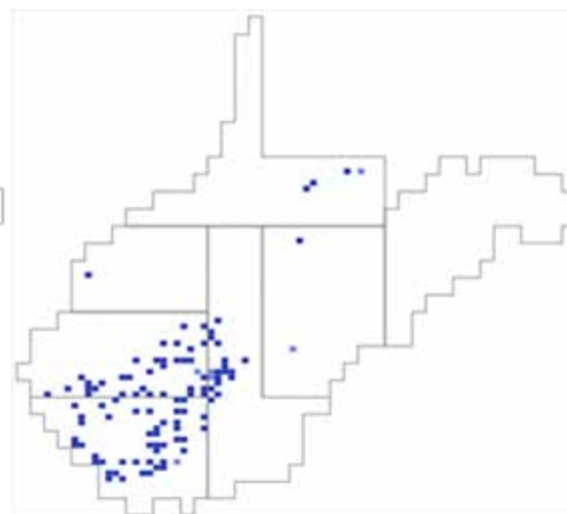
WRS staff and personnel initiated a 2-year survey effort to better understand the true distribution of this secretive species in the state. The first field season, completed in 2013, focused on an 8-county area, including Braxton, Clay, Nicholas, Kanawha, Fayette, Raleigh, Webster and Wyoming counties. Survey in 2014 focused on McDowell, Mingo, Logan, Boone, Lincoln and Wayne counties.

Survey work focused on identifying and visiting suitable habitat. Infrared aerial photography was used to identify possible habitat. On-site, personnel located birds by sight and sound, using song and call playback as an aid. Vegetation and habitat structure were also quantified. The effort significantly increased our understanding of distribution within the target area. Overall results for the 2-year survey:

- 361 locations were visited within the 14-county survey area between 5/15/13 and 7/15/14
- Species was detected at 85 of these sites
- 23 percent of detections occurred prior to song/call playback
- 77 percent of detections occurred during playback, suggesting that this could be an important tool for further survey



Known distribution, pre-survey.



Known distribution, post-survey.

Upland Sandpiper

Staff monitored a site (active in 2012) near Cabins, West Virginia, in Grant County during the 2014 breeding season. No birds were detected. As with loggerhead shrike, roadside bias likely limits detection of this species.

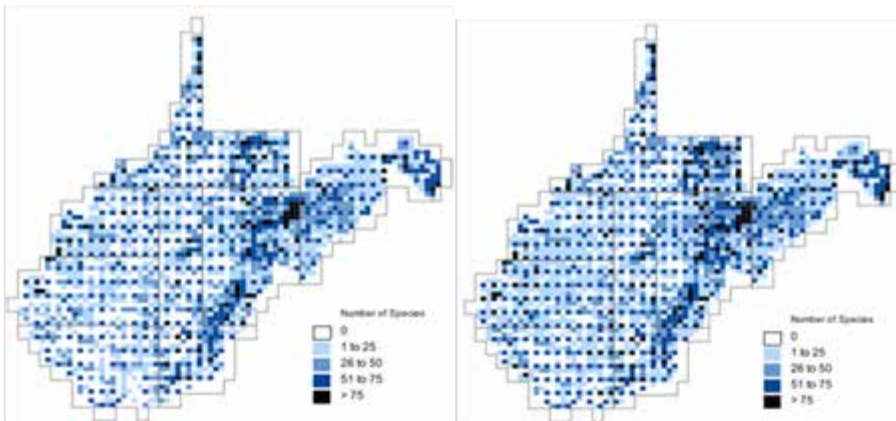
WV Breeding Bird Atlas II

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 distribution data cleanup and maintenance and analysis of the abundance point-count sampling database. Staff will be partnering with the Conservation Management Institute in Blacksburg, Virginia, to complete this analysis.

2014 highlights:

- Abundance point-count surveys completed on more than 60 priority blocks
- More than 12,000 individual bird observations submitted in 2014 to-date
- Total submissions for the entire atlas period now stand at ~100,000.
- Targeted atlasing effort in coalfield counties and other difficult-access areas continued
- A WRS press release seeking observations of eastern whip-poor-will from the public for a second year was hugely successful, with more than 1,000 responses from West Virginia residents.

Atlas status at the end of year 5 and end of year 6:



Work on preparation and writing of the atlas book is ongoing. Staff and volunteers worked to compile guidelines and materials, began the writing process, and have finalized a contract with WVU Press. The analysis and writing phase of the atlas project is expected to conclude in early 2017.

WV Bird Records Committee

Staff represented WRS on the committee.

Winter Backyard Bird Survey

The survey was continued; fall 2014 marks the beginning of the 26th year of the count.

ECOLOGY PROGRAM

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 95 vegetation plots across the state, concentrating on upland forests in poorly sampled areas of the state, with some samples of lithomorphic and limestone communities. Our database now includes data from more than 4,400 plots well distributed across the state's geography and ecosystems. They form a strong foundation for completing a vegetation classification for the state. Multivariate analysis was performed and statewide classification was completed for montane oak forests, northern hardwood forests and hemlock-hardwood forests. A classification of our state's ecological systems was applied for development of the State Wildlife Action Plan.

Ecology staff made significant contributions to wetland science and management in West Virginia. A large grant proposal was researched and submitted to EPA to develop a wetland functional assessment for the state. Staff developed a strategy for editing the National Wetland Inventory for the state and completed revisions for three watersheds. Staff assembled and mapped a list of West Virginia's exemplary wetlands with the highest biological diversity and these products were distributed to partners for review. Fieldwork included visits to several nominated exemplary wetlands to document vegetation composition and condition.

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 more than 500 rare plant occurrences were added to the Biotics database maintained by the Natural Heritage Program. Lichen collections from our lithomorphic plots yielded several West Virginia state records, including continental records and species new to science. Staff digitized collection label data from the Natural Heritage Program's herbarium in Elkins to allow quick access to information on the specimens. 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 continued to supervise volunteers who contributed substantially to GIS mapping, data entry, and field inventory of rare plants.

Ecology staff participated in numerous cooperative projects with partners. Staff attended a workshop to compare several different ecological system mapping approaches for the northeastern U.S. and worked with The Nature Conservancy to improve the Northeast Habitat Map for West Virginia. Staff worked with NatureServe to refine nationwide vegetation classifications, including review of Groups and Macrogroups in the U.S. National Vegetation Classification and description of a new Northeastern Interior Calcareous Oak Forest in the Ecological Systems Classification. Staff assisted with planning and attended the three day 2014 Crum Bryological Workshop at Blackwater Falls. Several West Virginia state record bryophytes and lichens were collected by the group and results will be published in the world's leading bryological journal, *Evansia*. Staff assisted the Mid-Atlantic Seed Bank to organize a seed collection workshop held at the Elkins Operations Center and to collect seed of early successional plant species for restoration and of native ash tree species threatened by the emerald ash borer.

Ecology staff participated in numerous outreach and educational events, including leading field trips for the Wildflower Pilgrimage, the Brooks Bird Club, and the combined WV-VA Native Plant Societies; teaching Master Naturalist classes on wetlands and plant identification and speaking at the annual meeting of the Ecological Society of America, the Climate Change in the Highlands conference at Blackwater Falls State Park and at the annual meeting of the Soil & Water Conservation Society in Weston.

Scientific Collecting Permits, Environmental Review and Data Management

Scientific Collecting Permits

Staff issued 313 Scientific Collecting Permits for a variety of projects including T&E species monitoring/surveys, graduate student research and stream. One Scientific Collecting Permit was denied. Fees for collecting permits during the fiscal year totaled \$33,850.

Data Requests

Staff responded in writing to 961 requests (table following) and many other requests by email and telephone.

Type of request	Number
Coal Mining Lands inquiries	113
Abandoned Mine Land reviews	36
Natural gas projects	409
Division of Highways	208
Other	195
Total	961

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

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 to be restored since the server crash in the spring; therefore, a tally of records updated and entered is not available.

Miscellaneous

Staff attended the NatureServe Biodiversity Without Boundaries Conference in New Orleans in April 2014. Staff also participated in several conference calls with the Southeast Association of Fish and Wildlife Agencies Wildlife Diversity Committee.

Staff provided training to District Law Enforcement Officers in regards to the Reptile and Amphibian Regulations that went into effect Jan. 1, 2014. Presentations on the new regulations were given to the U.S. Army Corps of Engineers and the Office of Surface Mining.

Botany

Endangered Plants

Throughout the growing season of 2014, a limited amount of monitoring surveys for four federally listed endangered and two federally listed threatened plant species (T&E) were conducted using a small amount of funds from the U.S. Fish & Wildlife Service under the Endangered Species Act, Section 6. In 2013, we began a policy of marking federal Endangered Species Act, Section 6 funds received through the U.S. Fish & Wildlife Service to be used the following growing season. As there were insufficient staff to complete the work and one staff person was ill and unable to conduct field

work for part of the growing season, only part of the funds available in 2014 for monitoring and doing conservation action for running buffalo clover (LE), Virginia spiraea (LT), shale barren rockcress (LE), northeastern bulrush (LE), and small whorled pogonia (LT) were spent and no funds were spent to monitor harperella (LE). Therefore, most of those funds will be carried over for use in the 2015 growing season.

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 to requests for an update 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 U.S. Fish & Wildlife Service. Several workshops were conducted to train people in the identification, conservation, and management of those species to enhance the skills of those potential surveyors.

Running buffalo clover (*Trifolium stoloniferum*)

WRS personnel accompanied a representative of Brookfield Renewable Power to conduct a monitoring assessment of the Cotton Hill site of running buffalo clover (listed endangered) May 28, 2014. 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. WRS and Brookfield personnel met in 2014 to dismore than nine rooted crowns of RBC, one large and with two flowering stems. Competing weeds were removed from around the plants, the threat of non-native invasive plants to the population was assessed, and the degree of shade that is being produced by the closing canopy tree layer was noted. It appears that the increased filtered sunlight at the Cotton Hill patch of RBC encouraged the sprouting of more rooted crowns.

Brookfield staff had been excited about attempting to restore 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 (CCSD), part of the Missouri Botanical Garden in St. Louis. However, with the natural restoration of the population of RBC at Cotton Hill, Brookfield staff, WRS staff, and the staff of the West Virginia Field Office of the U.S. Fish & Wildlife Service agree that it is more desirable to continue to encourage the natural restoration of the small population of RBC without using CPC stored seeds.

WRS staff met with staff from the USDA Forest Service, Monongahela National Forest, Cheat Ranger District, to conduct a field review and planning meeting within the Cheat Cooperative Wildlife Management Area (Cheat WMA) to develop management plans for enhancing RBC habitat productivity at historical sites. Using select forest management practices and direct management actions at those sites, it is hoped that management practices will enhance wildlife habitat, forest health, and RBC population size and health. To date, only a qualitative assessment has been made of the largest population within the logging operation conducted in 2011, but staff saw an abundance of running buffalo clover at the site in 2013 and 2014.

Shale Barren Rockcress (*Arabis serotina*)

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. WRS personnel continue to consult with U.S. Navy Information Operations Command

personnel regarding the management of the largest population in West Virginia of SBR, located on the Little Fork Shale Barren. We continue to assist their personnel in the control of the invasive species Japanese stiltgrass above and below the Little Fork shale barren.

WV DNR, WRS and the U.S. Navy, Atlantic Division, Naval Facilities Engineering Command have engaged in two cooperative agreements begun in 2012 and 2013, conducting a pilot program of the use of time lapse cameras in the study of the life history of the endangered species, shale barren rockcress on the Little Fork Shale Barren, on the property of Navy Information Operations Command Sugar Grove, in Pendleton County in 2013 through 2015.

Of the four time lapse cameras that were installed in one 10m x 10m area on the barren in 2013, each one trained on the images of basal rosettes and flowering and fruiting inflorescences of SBRC, one eventually failed when it filled with water, one was chewed upon, presumably by a black bear, and two were moved off their photo targets, presumably by buck deer rubbing their antlers on the camera bodies. One camera's mounting bracket was found broken. Still, time lapse photo imagery of individuals of SBRC plants (rosettes and bolting plants) were recorded and are being analyzed. Attempts have been made to discourage large mammal disturbance of the cameras by surrounding them with a small electric fence. Researchers collected time-lapse images of rosettes and young bolting plants of *Arabis serotina* from mid-July 2013 to present day. Most cameras were aimed to shoot a daily image at 10 a.m. of rosettes, and one was aimed to photograph the development of a bolting (flowering) plant. It is hoped that the images will be useful in demographic ecological observations. By August 2014, researchers attempted to document what animals were molesting the time-lapse cameras by placing a motion-sensitive camera at the end of the row of time-lapse cameras.

WVDNR and James Madison University are engaged in a cooperative agreement using the Navy funds to conduct ongoing studies of the reproductive biology of the shale barren rockcress including pollination experiments, pollinator observations on two individuals, examination of nectar production, a test to check for movement of pollen to other plants using fluorescent dust, the collection of flower buds to be used in a pollen/ovule ration examination, the documentation of the growth of individual rosettes other than those used in the time-lapse photography study, and the observation of signs of herbivory.

Researchers observed for only the third documented time that at least some of this biennial plant's flowering bolts are connected to adjacent rosettes by underground stems. Preliminary examination of the time lapse images indicate that some larger rosettes began bolting (producing flowering stems) as early as late February 2014, even though the plants generally bolt in July through early September. The images have also documented that many rosettes that were present from June 2013 throughout the winter of 2013/2014 had disappeared completely by July 2014.

Staff continued assisting and advising researchers in Virginia and West Virginia who are investigating the potential impacts of controlled burning on matrix forests surrounding populations of shale barren rockcress on the George Washington / Thomas Jefferson National Forests (GW/TJ). Working cooperatively with personnel of the GW/TJ, a small qualitative study of pre- and post-controlled burning of the matrix forest surrounding certain shale barrens that support SBRC has been designed and field observations are ongoing within selected areas on the barrens delineated in recent years by polygons projected with Global Information System (GIS) technology.

Harperella (*Harperella nodosum*; = *Ptilimnium nodosum*)

Over the past 10 years, WRS personnel have documented the decline of 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. WRS staff have welcomed the assistance of an engineer and a hydrologist with WVU Technical University, who is seeking to understand the dramatic changes taking place on Sleepy Creek that are removing large amounts of silt, sand, and gravel from subpopulations that have been relatively stable until recent years. The lack of personnel have made it necessary to delay in conducting the monitoring of harperella on these rivers in 2014 and it is hoped that the funds from the U.S. Fish & Wildlife Service will be carried over into 2015 for continued monitoring of this LE species.

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 WRS personnel have been monitoring it on private and public lands and cooperatively managing one population on the George Washington / Thomas Jefferson National Forest. No monitoring visit was made to NB sites by our program in 2013 due to funding limitations, and no monitoring visit was made to them in 2014 due to staffing limitations

Small Whorled Pogonia (*Isotria medeoloides*)

The small whorled pogonia (SWP), an orchid species, was added to the U.S. list of federally endangered species in 1982, and in 1994 it was reclassified to threatened status. 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 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.

WRS personnel are working cooperatively with the Smithsonian Institution as they conduct research on SWP involving annual observations including tagging and mapping individuals, observing plant size and reproductive status, observations of herbivory, molecular studies of individual plants, molecular studies of mycorrhizal fungi, and seed viability studies.

WRS personnel are consulting with personnel of the West Virginia field office of U.S. Fish & Wildlife Service, the Morgantown office of the Natural Resource Conservation Service (NRCS), and the staff of the Monongahela National Forest to better define potential habitat for SWP using GIS and modeling technology.

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.

The evaluation of our monitoring methodology was completed in 2012, but no additional development of an alternative monitoring methodology was completed in 2014 in part due to lack of personnel to complete the work.

A small workshop on the identification and monitoring of VS was conducted in July 2014 to train National Park Service seasonal personnel (who work in the New River Gorge National River, Gauley River National Recreation Area, and the Bluestone National Scenic River) and a few consulting biologists working for engineering firms working in West Virginia in 2014.

Information and Education

A number of information and education programs related to native and invasive plants in West Virginia were conducted by the botanical staff of the WRS, 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.

WRS 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, WRS 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. Curators from around the state met at Fairmont State University in 2013 and continue to work as a team with the goal of migrating data into a database called SPECIFY. It's hoped that every herbarium in the state will have SPECIFY in place, collecting botanical voucher data. We are working cooperatively to involve all small herbaria in the state and to eventually gather all botanical data to a common system that will be accessible online by anyone with access rights. Little has been accomplished in 2014 because of technical difficulties in migrating legacy collection data into SPECIFY. Presently, the current Curatorial Database System (CDS) is operating at WRS, West Virginia University, and Davis and Elkins College. Efforts continue to migrate the legacy data within the CDS into SPECIFY

Zoology Program

Spotted Skunk (*Spilogale putorius*)

In 2014, WRS staff used trail cameras to survey for spotted skunks. Surveys occurred in Pendleton, Grant and Pocahontas counties. Spotted skunks were recorded in Pendleton and Grant near previous records. A winter den was located near the trail location on Peters Mountain in Pendleton County. The Ant Hill camera site in Pendleton County recorded two skunks interacting. A spotted skunk was recorded on Brown Mountain in Pocahontas County. This record extends the known distribution of the species in the state. This project continues to better describe the known population in Pendleton and Grant counties and explore new areas throughout the historic range in eastern West Virginia.

West Virginia Butterfly Atlas

Work continued on the West Virginia Butterfly Atlas. Staff conducted one formal training at the annual meeting in Elkins, with six additional volunteers trained on a one-to-one basis. As of June 30, 2014, 58 volunteers and 18 cooperators have been trained. For the 2013 field season, 15 cooperators and volunteers submitted 537 vouchers from 33 WV counties. These included 78 butterfly species, 16 species of targeted moths, and 92 species of other moths. Participants documented 109 county records and two state records for nominate species. All counties on the Monongahela National Forest were surveyed to finish field work for that grant. A preliminary report was submitted to the USFS.

A week was spent at the Smithsonian Museum of Natural History in Washington, D.C. to survey their lepidoptera collections for historic West Virginia records. Staff documented 587 new butterfly and moth records with many county records, including records of nominate species of azures and crescents. Staff was able to photograph specimens of cryptic species to aid in their identifications back in West Virginia.

All vouchers from the 2013 field season were entered into a database. All locations were confirmed and coordinates generated if needed. The fledgling Data Entry Portal was reworked and launched and, barring some connection problems, has been working well. A newsletter was written and distributed to participants and other interested parties. All participants received copies of their data and additional materials for the 2014 field season if needed.

One of our outstanding volunteers was awarded a DNR cooperative grant to survey for butterflies and targeted moths in the chronically under-surveyed southwestern counties. Her data will likely provide many county records and specimens of some cryptic nominate species of cresscents.

Aquatic Community Assessment and Restoration Program

Mussels

Two long-term monitoring sites were re-assessed during FY2013/2014. These included the Elk River at Sutton, Braxton County and Hackers Creek, Lewis County.

Severe temperature swings were noted during earlier monitoring on the Elk River at Sutton, which led to the United States Army Corps of Engineers (COE) modifying operations during high flows. Previous operating procedures called for the top port to be closed during high flows, discharging only cold water from the lower port. This resulted in major temperature changes over just a day or two. No recruitment was observed during our last monitoring of this site (2009). The temperature swings were believed to have negatively affected mussel reproduction. The change in discharge operations occurred by June 2010 and now the top port is left open during high flows. Although this does not eliminate the drops in temperature, it does significantly reduce them. Monitoring at this site was again conducted in June 2014. No juvenile mussels were observed less than 12 years old. The health of the river in this reach is even more of a concern given the number of fresh dead and dying mussels observed during the survey. WVDEP and USFWS were notified but no investigation has occurred.

Hackers Creek monitoring showed mussel populations continue to decline since previously surveyed in 2009. Poor land and agricultural management practices are likely suspects as well as the previous mine blowout that was believed to have significantly reduced the mussel resources in Hackers Creek. The federally endangered clubshell, though in obvious decline, still occurs and is now the dominant species.

In September 2013, this restoration effort at Muskingum Island was assessed. In the three years since stocking 159 of the 203 individuals stocked have been seen at least once. In 2013, 15 individuals were observed which had not been seen since stocking in 2010. Only 44 of the 203 have not been seen since stocking. A total of four confirmed deaths have been recorded since stocking. In June 2014, the Kanawha River population was again assessed and survival continues to be good with only one additional animal confirmed dead.

Otter predation has also significantly impacted the other mussels in this area. A total of 114 individuals of 12 species were collected in September 2013 from a midden pile. Nearly half of these were tagged individuals from our previous monitoring events. Three individuals were the federally endangered snuffbox. This site is slated for full monitoring in 2015. In September 2013, additional northern riffleshell and federally endangered rayed bean mussels were provided from another bridge salvage project in Pennsylvania. They were also stocked at Queen Shoals after undergoing quarantine at the USFWS Middle Island facility. WSSNFH provided another 45 propagated northern riffleshell juveniles in October 2013. Introduced mussels were assessed in May 2014 and survival continues to be good.

In May 2014, assisted by the DOH and USFWS, we conducted surveys on the Elk and Kanawha Rivers to determine if mussel resources were potentially impacted from a chemical spill on the Elk River. At this

time, no impact was detected. Four additional mussel surveys were conducted on the Elk River during this fiscal year.

The WRS is working cooperatively with the USFWS on a large river mussel restoration project. Sites are selected for restoration and pilot populations were stocked and assessed. In June 2013, 200 federally endangered clubshell were collected from the Allegheny River in Pennsylvania. These animals underwent quarantine at our Belleville Complex. Stocking was delayed due to high water but eventually were stocked into three locations, two on the Ohio River and one on the Little Kanawha River. All mussels were tagged with glue-on shellfish tags and PIT tags.

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, much time was spent collecting mussel broodstock for propagation. These animals were distributed to Tennessee Tech, Kentucky Department of Fish and Game, Genoa National Fish Hatchery (GNFH), Ohio State University and WSSNFH. Staff also cooperated with the stocking of more than 14,000 mussels into the Ohio River. These included juveniles of eight species and adult mucklets provided by the DOH from the New River bridge relocation project. This year marked the first stocking of the federally endangered pink mucket with more than 400 stocked at Muskingum Island. The pink mucklets were propagated by Tennessee Tech University. The DNR provided individuals of five species. All mussels were tagged and stocked into the Ohio River.

Surveys were also conducted at Blennerhassett Island and Degussa in September 2013, both of which are within the recovering river reach but are not being actively restored.

Resulting from the broodstock we provided, Genoa National Fish Hatchery sent more than 10,000 newly transformed juvenile black sandshell mussels to attempt grow-out in raceways at Palestine Fish Hatchery (PFH) in Wirt County. WSSNFH also provided us with six species of juvenile mussels which were also placed into raceways at PFH for continued grow-out.

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. Broodstock for 2014 mussel restoration work was collected during the fall of 2013 and spring of 2014 and held at the agencies Belleville Complex and the Clayton Farm Pond. This broodstock was used during the spring of 2014 to inoculate host fish which were subsequently stocked into Dunkard Creek. Bluegill were used to host larvae of fat mucket and plain pocketbook mussels and were stocked at two locations on Dunkard Creek. Bluegill were collected from Dixon Lake and Mason Lake. Broodstock mussels were tagged and released into Dunkard Creek.

Freshwater drum were electro-fished from the Monongahela River and used to host larvae of pink heelsplitter and fragile papershell mussels and were subsequently stocked at one location on Dunkard Creek. The mussel broodstock were then stocked into Dunkard Creek.

In February 2014, the COE dropped East Lynn Lake below normal winter pool to conduct dam inspections and repairs. A mussel kill investigation was conducted. A limited number of mussels were stranded as a result of these activities. In March, an oil spill was investigated on Toms Fork within the Middle Island Creek Watershed. This watershed contains high-quality mussel resources, including federally endangered species. Little evidence of oil was found to remain in the stream and no impacts were evident.

In June 2014, assisted by the USFWS and DEP, the Wildlife Diversity Unit conducted a mussel survey on the Kanawha River upstream of Montgomery. The survey was conducted to determine if there were impacts from a fly ash discharge into the river. Though some gray colored ash fines were still visible at the confluence of the unnamed tributary and along the edge of the river, we could not determine any acute mortality resulting from the discharge.

Additional mussel surveys were conducted on the following streams: Little Kanawha River (4) and tributaries (8), Middle Island Creek Watershed (McElroy Ck - 1), West Fork River Watershed (Jesse Run - 1), Tygart Valley River (3) and tributaries (5), Elk River (4), Sleepy Creek (1), Abbs Valley Creek (1), Fishing Creek (3), and Lost River.

The WVDOH will be replacing a bridge on the New River at Prince. Mitigation measures include the relocation of bivalves within the area of direct impact. Prior to conducting the relocation, a genetics study was conducted by WVU to aid in site selection to receive the mussels. The Diversity Unit assisted with this effort in 2012. In October 2013, working in cooperation with the WVDOH to accomplish this relocation effort, we stocked more than 2,000 muckets within our two restoration sites on the Monongahela River. As previously mentioned, an additional 949 were stocked at the head of Blennerhassett Island on the Ohio River.

A mussel genetics study is being conducted by Dr. Amy Welsh at WVU. We are cooperating by collecting tissue samples of muckets from various populations around the state. Tissue sampling continues.

Other Mussel Activities:

- Reviewed and commented on mussel issues on stream activity requests.
- Revised the West Virginia Mussel Survey Protocol.
- Continued development of a Statewide Scientific Dive Safety Plan.
- Coordinated and participated in training for agency divers and partners on care and repair of equipment.
- Coordinated and participated in annual diver fitness tests for agency divers and partners.
- Completed review and revision of the conservation status rankings of West Virginia mussel species.
- Attended the Ohio River Valley Mollusk Group Meeting.
- Participated in annual COE maintenance dredging meeting by webinar.
- Assisted with the Eastern Regional Science Fair.
- Attended the bi-annual workshop of the Freshwater Mollusk Conservation Society. This year's topic was dam removal effect on mollusks.
- Assisted with the Becoming an Outdoors-Woman Program.
- Staff participated in annual driver safety and cyber security training.
- Staff attended the agency's annual biologist meeting.
- Staff attended DEP webinar on water use management.
- Staff attended the Mid Atlantic Aquatic Biologists Meeting.

Fishes

Wadeable and small stream work continued as well as the development and implementation of standardized protocols for fish sampling in large non-commercial rivers; methods for larger rivers using boat-mounted electro-fishing equipment were based on modified EPA protocols for the National Rivers and Streams Assessment. An initiative to target potential Marcellus Shale extraction sites was also continued; surveys to collect baseline fish and water quality data were conducted with District 3 and 6 personnel in Middle Island Creek and South Fork Hughes Rivers. In addition, conductivity loggers were deployed in four streams in the Middle Island Creek drainage to monitor possible effects

of this gas development. Work continued on the classification of fish communities with data collected and a document intended for publication is in progress. Middle Island Creek surveys relative to the Jug Wildlife Management Area were performed with the WRS in support of stream restoration and management planning.

One-hundred-eighteen stream surveys were completed in 21 sub-watersheds, fulfilling needs for both monitoring and assessment objectives of the stream assessment program. Among those surveys completed this past year, assistance was provided to the Environmental Coordination, Coldwater Fisheries and Warmwater Management units (i.e., Districts 3 and 6) of the Division, and West Virginia Wesleyan College, West Virginia University and Army Corps of Engineers. Nine boat surveys were also completed to validate a quantitative protocol for non-wadeable stream assessments and a monitoring plan to be implemented in succeeding years.

Three collaborative papers were published on certain state fishes, and a major manuscript was initiated on the addition of several fishes to the state faunal list. In addition, several family and a certain species keys were written; these efforts will eventually be integral components of an Atlas regarding the status and distribution of all fishes of West Virginia.

TECHNICAL SUPPORT UNIT

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. A new fish habitat restoration project was initiated on Mill Creek in Kumbrabow State Forest. Construction on this project will continue in the next fiscal year. Other streams were assessed as potential sites for additional future work. A new cooperative agreement was 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 mainstem in 2012. Production began on a video documentary about the Shavers Fork restoration efforts.

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 U.S. Fish and Wildlife Service (USFWS). The remaining 25 percent accrues from nonfederal sources including investment income from the West Virginia Wildlife Endowment Fund administered by the Division of Natural Resources 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 sportfishing and \$24 million of associated economic impact annually.

Planning Program

The fish and wildlife planner coordinated with WVU staff to continue the update to the Wildlife Resources Section Capital Improvements Strategic Plan. Work began to update the WRS's State Wildlife Action Plan, which is a requirement to continue receiving federal funds under the State Wildlife Grant program administered by the USFWS. Assistance was provided to the WRS's endangered species staff for a major land acquisition project in Cheat Canyon, the first phase of which was completed during this fiscal year. Assistance was provided in developing the Division's annual Budget Narrative. Fiscal notes were prepared and submitted on legislation during the 2014 legislative session.

Coordination Program

Field and/or office coordination continued on the U.S. Army Corps of Engineers' (COE) Bluestone Dam Hydropower Development Study.

Continued action (e.g., 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, and Glen Ferris Dam on the New River. An unused, existing hydro-generator installed at Stonewall Jackson Dam has been proposed for commercial use. A preliminary permit was issued for that project. The final license for the Jennings Randolph Hydroelectric Project was completed and construction is anticipated to begin in 2016. The license contains articles for environmental safety and habitat enhancements for the North Fork of the Potomac River. The Willow Island Project is under construction and due to be completed during 2014. 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. Presently, there are five functioning wind projects operating in West Virginia. These projects generate 580 megawatts of power.

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. Field reviews were conducted to evaluate the monitoring reports for the constructed wetland mitigation site for the US Route 10 upgrade in Logan County and Corridor H in Tucker County. The 401 was approved for the Chief Logan State Park Road which would provide a more direct access from the Conference Center to Chief Logan State Park. Also the 401 was approved for the I-79 interchange in Morgantown between Star City and Westover. WV highway 10 and the fill in the Laurel Branch of the Guyandotte River was very controversial and necessitated a meeting between the Army Corps of Engineers, the consultant, and the applicant before 401 certification was issued. A 401 certification for the Virginia Line Bridge in Monroe County and Recertification for the Coalfields Expressway Realignment were issued without incident. Highways field reviews were attended for the Tablers Station Connector and Inwood Bypass both in Berkeley County.

State Clean Water Act (CWA) certifications continue to be reviewed under the Memorandum of Understanding (MOU) with 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, and Natural Resources Conservation Service (NRCS) and West Virginia Conservation Agency (WVCA) project reviews. The Central West Virginia Regional Airport project in Charleston is very controversial due to its impacting streams and wetlands in order to fix a "flight obstruction" and the proposed mitigation plan does not provide sufficient detail to determine the likelihood of success. However, once we receive a final, more detailed mitigation plan, the project will be approved.

Significant time continues to be spent working with the WVDEP and the COE evaluating and refining the science-based assessment protocol (WV 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 Sept. 10, 2014, the ILF has received \$35,473,223.70 in payments. Staff expended considerable efforts this year coordinating a number of ILF projects including a major stream restoration project on Hillcrest WMA, a fish passage project on Nathaniel Mountain WMA, and a wetland/stream project on Frozen Camp WMA. The Nathaniel Mountain project was completed in September 2014. The Hillcrest project is in final permitting and the Frozen Camp project is being developed.

Staff responded to requests from the West Virginia Division of Highways (WVDOH) and numerous watershed groups for information on permitting issues relating to wetland disturbance, mitigation obligations, permit compliance, Natural Stream Design and other issues. Working with WVDOH, staff negotiated a new mitigation plan for Corridor H, which included a meeting about the moving of a bridge alignment because of the small whorled pogonia and the core borings and potential alignments of the Kearns to Parsons section. Also, a meeting was attended of the proposed State Highway 220 which would connect I-68 in La Vale Maryland to Corridor H in West Virginia.

Staff attended additional field reviews and provided design input for the development of a mitigation bank on Hackers Creek. However, the project was determined not feasible. Following a field review, the newly proposed Beverly Tygarts Valley mitigation bank appears promising. Coordination continued on proposed flood control/water supply impoundments in Hardy County.

Significant time continues to be spent implementing the CWA Regional Permit to assist landowners with small stream restoration and management activities. The management of regional land owners' permits and the involvement of the West Virginia Conservation Agency and WRS were also discussed. As the MOU was not renewed, currently the Army Corps of Engineers is the sole agency in charge of the regional landowner permits through the nationwide process.

Approximately 10 landowner stream plans were received and reviewed during this reporting period. The Regional Permit for Stream Restoration Activities to be performed by the WVCA was scheduled for renewal this year. Staff field reviewed projects authorized under this regional permit and suggested minor changes to the Regional Permit. Unfortunately the COE determined that the regional permit was redundant and these projects could be permitted using existing nationwide permits and a Memorandum of Understanding between the COE, WVDEP, WVDNR and the WVCA. Considerable time was allocated formulating the MOU. Currently there is not an agreement between the agencies but we are in the final revisions of a MOU.

Staff has committed significant resources reviewing and commenting on re-issuance of Nationwide Permits (NWP). Several meetings were held to discuss proposed modifications to the NWP and

suggestions were made to the COE, EPA and WVDEP for proposed regional conditions to protect aquatic resources.

Staff worked with the NRCS 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. These projects involved implementing minor modifications to channel dimensions and in-stream structures in place of traditional hard armor engineering (riprap).

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; approximately 156 mine pre-plans were reviewed.

Significant time was spent working on stream restoration plans and coordinating mitigation plans for mine impacts to aquatic ecosystems. Assistance was provided to WVDEP in identifying potential aquatic improvement projects that could be completed by mining companies in lieu of administrative penalties for violations. Comments were provided for a regional permit for Amigo Portals Project which consists of sealing mine gates and discharging fill material into the stream channel to provide bank stabilization and linear transport.

Significant time was spent working on wetland mitigation banking. The state currently has four operational banks with several others in various stages of development. Sites were examined in multiple counties statewide according to hydrology, vegetation, and soils to determine whether or not they were in fact "wetlands." A seedbank collection workshop was attended to determine the potential for West Virginia. Also, wetlands delineation training was attended in which staff learned how to more effectively define wetlands. Furthermore, a wetland restoration workshop was attended.

Work was directed to validating data collected earlier, developing additional landscape-level data, establishing a wetland database and developing a Web-based tool to utilize these data. We are in the final stages of 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.

Staff served on steering committees for several conferences on habitat restoration and water quality. 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.

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.

Coordination with National Wildlife Refuges included assistance with developing beaver survey protocol at Canaan Valley NWR and development/revisions to a Habitat Management Plan and Hunt Plan for Ohio River Islands NWR.

Staff also worked with DNR heritage botanists and USFS personnel to determine a re-vegetation plan for a 200 acre refuse site at the Carter Roag Coal Company. The purpose of this planting plan is to restore the area to productive wildlife habitat in a mix of native and domestic herbaceous groundcover and mostly native tree and shrub species. The planting plan was accepted by the coal company with a few minor modifications.

Staff offers assistance to other sections and participates in numerous game and fish management activities including but not limited to National Hunting and Fishing Day, fish stocking, chronic wasting disease 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.

Significant time was spent training staff.

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 was deployed 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 are 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 Chronic Wasting Disease 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. Many of these maps were provided to the public in September 2012.

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 initiated work to develop/enhance a Web-tool to provide the public increased access to Wildlife Resources Section 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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