DEPARTMENT OF CONSERVATION AND RECREATION

POLICY AND PROCEDURES ON SOIL AND WATER CONSERVATION DISTRICT COST-SHARE AND TECHNICAL ASSISTANCE FUNDING ALLOCATIONS (FISCAL YEAR 2014)

(Approved July 26, 2013)

1. Policy Purpose:

This Policy and Procedures document specifies the Department of Conservation and Recreation's (Department) process, developed in consultation with the Virginia Soil and Water Conservation Board (Board), by which funds are to be allocated by the Department to the Commonwealth's 47 local Soil and Water Conservation Districts (Districts) for cost-share and technical assistance (Fiscal Year 2014 or FY14). The Policy also highlights the water quality emphasis of the Virginia Agricultural Best Management Practices Cost-share Program and the targeted use of allocated cost-share funding. A separate Board Policy governs the FY14 distribution of administrative and operational support funds to Districts.

2. Cost-share Program Mission and Eligibility:

The Virginia Agricultural Best Management Practices Cost-share Program (VACS) is administered by the Department through the Districts. The Program's goal is to improve water quality in the state's streams, rivers, and the Chesapeake Bay. VACS offers cost-share assistance as an incentive to carry out construction or implementation of selected Best Management Practices (BMPs). The basis of VACS is to encourage the voluntary installation of agricultural BMPs to meet Virginia's non-point source pollution reduction water quality objectives. Although resource based problems affecting water quality occur on all land uses, VACS promotes efforts for corrective action on agricultural lands only. VACS emphasizes the implementation of agricultural BMPs in locations that provide the greatest nutrient and sediment reductions for the taxpayer's dollar spent. Cost-shared BMPs must maximize nutrient and sediment reductions and also protect the taxpayer's interest, by implementing the most cost-effective BMPs possible in locations that achieve the greatest pollutant reductions on a field by field basis. VACS objectives include special emphasis on the reduction of nutrients (nitrogen and phosphorus), and sediment delivered to the Chesapeake Bay; by preventing additional pollution from entering state waters; and meeting the criteria for Virginia's compliance with Section 319 of the Clean Water Act. VACS implementation should be based upon sound conservation planning and best professional judgment.

For the purposes of VACS, agricultural land means land being used in a bona fide program of agricultural management and engaged in the production of agricultural, horticultural, or forest products for market. In order to be considered agricultural land, the real estate must consist of a minimum of five contiguous acres and there must be verifiable gross receipts in excess of $1,000 per year from the production or sale of agricultural, horticultural or forest products produced on the applicant's agricultural land for each of the past five years. The greater than $1,000 threshold may be documented by using crop type acres and livestock numbers collected as part of the conservation planning inventory or other acceptable forms of proof including Internal Revenue Service (IRS) forms or other accounting records certified by a tax preparer that show profit or loss from farm operations. Non-industrial private forest lands are exempt from the $1,000 requirement. (See Part 4: Definitions for further explanation.)

Readers should refer to the *Program Year 2014 Virginia Agricultural Cost Share (VACS) BMP Manual* for additional requirements associated with the implementation of the Virginia Agricultural Best Management Practices Cost-share Program.

3. Authority:

This funding distribution Policy has been developed to provide transparency, predictability, and consistency to the processes by which the cost-share and technical assistance funding set out in Items 360 H and M of Chapter 806 of the 2013 Virginia Acts of Assembly (the 2013 Appropriation Act) is allocated and distributed to Districts. Funds subject to this Policy are set out in Sub-programs 50322 (Technical Assistance to Soil and Water Conservation Districts) and 50323 (Agricultural Best Management Practices Cost Share Assistance) and are guided by the following specific budget provisions within Item 360:

H.1. Included in the amounts for Stormwater Management is $9,100,000 the first year [FY13] and **$9,100,000** the second year [FY14] from *nongeneral funds* to be deposited to the Virginia Natural Resources Commitment Fund, a subfund of the Virginia Water Quality Improvement Fund, as established in § 10.1-2128.1, Code of Virginia. The funds shall be dispersed pursuant to § 10.1-2128.1, Code of Virginia.

2. The source of an amount estimated at $9,100,000 [FY13] the first year and $9,100,000 the second year [FY14] to support the nongeneral fund appropriation to the Virginia Natural Resources Commitment Fund shall be the recordation tax fee established in Part 3 of this act.

3. Out of these amounts, a total of eight percent, or **$1,200,000**, whichever is greater, shall be provided to Soil and Water Conservation Districts for technical assistance to farmers implementing agricultural best management practices.

*M.1. Notwithstanding § 10.1-2129 A., Code of Virginia, $16,949,115 the first year from the general fund shall be deposited to the Virginia Water Quality Improvement Fund established under the Water Quality Improvement Act of 1997. Of this amount, **$14,649,115** is authorized for transfer to the Virginia Natural Resources Commitment Fund, a subfund of the Virginia Water Quality Improvement Fund, and $1,000,000 is designated for direct deposit to the Virginia Water Quality Improvement Fund for use for local stormwater assistance grants and for developing an agency program to provide assistance to localities with stormwater programs. Pursuant to paragraph B of Item 358, $1,300,000 is designated for deposit to the reserve within the Virginia Water Quality Improvement Fund. The monies transferred to the Virginia Natural Resources Commitment Fund shall be disbursed in accordance with § 10.1-2128.1, Code of Virginia, including the eight percent for distribution to soil and water conservation districts to provide technical assistance.*

2. This appropriation meets the mandatory deposit requirements associated with the FY 2012 excess general fund revenue collections and discretionary year-end general fund balances.

C.1. It is the intent of the General Assembly that all interest earnings of the Water Quality Improvement Fund shall be spent only upon appropriation by the General Assembly, after the recommendation of the Secretary of Natural Resources, pursuant to § 10.1-2129, Code of Virginia.

2. Notwithstanding the provisions of §§ 10.1-2128, 10.1-2129 and 10.1-2128.1, Code of Virginia, it is the intent of the General Assembly that the Department of Conservation and Recreation use interest earnings from the Water Quality Improvement Fund and the Virginia Natural Resources Commitment Fund to support one position to administer grants from the fund.

In addition to the authorities set out in the 2013 Appropriation Act, the Code of Virginia contains the following Board duties applicable to this policy:

§ 10.1-2132. Nonpoint source pollution funding; conditions for approval.

A. The Department of Conservation and Recreation shall be the lead state agency for determining the appropriateness of any grant related to nonpoint source pollution to be made from the [Water Quality Improvement] Fund to restore, protect and improve the quality of state waters. ….

D. The Director of the Department of Conservation and Recreation shall manage the allocation of Water Quality Improvement Grants from the Virginia Natural Resources Commitment Fund established under § 10.1-2128.1.

§ 10.1-2128.1. Virginia Natural Resources Commitment Fund established.

A. There is hereby created in the state treasury a special nonreverting fund to be known as the Virginia Natural Resources Commitment Fund hereafter referred to as "the Subfund," which shall be a subfund of the Virginia Water Quality Improvement Fund and administered by the Department of Conservation and Recreation. The Subfund shall be established on the books of the Comptroller. All amounts appropriated and such other funds as may be made available to the Subfund from any other source, public or private, shall be paid into the state treasury and credited to the Subfund. Interest earned on moneys in the Subfund shall remain in the Subfund and be credited to it. Any moneys remaining in the Subfund, including interest thereon, at the end of each fiscal year shall not revert to the general fund but shall remain in the Subfund. Moneys in the Subfund shall be used as provided in subsection B solely for the Virginia Agricultural Best Management Practices Cost-Share Program administered by the Department of Conservation and Recreation.

B. Beginning on July 1, 2008, and continuing in each subsequent fiscal year until July 1, 2018, out of such amounts as may be appropriated and deposited to the Subfund, distributions shall be made in each fiscal year for the following purposes:

1. Eight percent of the total amount distributed to the Virginia Agricultural Best Management Practices Cost-Share Program shall be distributed to soil and water conservation districts to provide technical assistance for the implementation of such agricultural best management practices. Each soil and water conservation district in the Commonwealth shall receive a share according to a method employed by the Director of the Department of Conservation and Recreation in consultation with the Virginia Soil and Water Conservation Board, that accounts for the percentage of the available agricultural best management practices funding that will be received by the district from the Subfund;

2. Fifty-five percent of the total amount distributed to the Virginia Agricultural Best Management Practices Cost-Share Program shall be used for matching grants for agricultural best management practices on lands in the Commonwealth exclusively or partly within the Chesapeake Bay watershed; and

3. Thirty-seven percent of the total amount distributed to the Virginia Agricultural Best Management Practices Cost-Share Program shall be used for matching grants for agricultural best management practices on lands in the Commonwealth exclusively outside of the Chesapeake Bay watershed.

C. The Department of Conservation and Recreation, in consultation with stakeholders, including representatives of the agricultural community, the conservation community, and the Soil and Water Conservation Districts, shall determine an annual funding amount for effective Soil and Water Conservation District technical assistance and implementation of agricultural best management practices pursuant to § 10.1-546.1. Pursuant to § 2.2-1504, the Department shall provide to the Governor the annual funding amount needed for each year of the ensuing biennial period. The Department shall include the annual funding amount as part of the reporting requirements in § 62.1-44.118.

§ 10.1-2128. Virginia Water Quality Improvement Fund established; purposes.

A. There is hereby established in the state treasury a special permanent, nonreverting fund, to be known as the "Virginia Water Quality Improvement Fund." The Fund shall be established on the books of the Comptroller. The Fund shall consist of sums appropriated to it by the General Assembly which shall include, unless otherwise provided in the general appropriation act, 10 percent of the annual general fund revenue collections that are in excess of the official estimates in the general appropriation act and 10 percent of any unrestricted and uncommitted general fund balance at the close of each fiscal year whose reappropriation is not required in the general appropriation act. ….

§ 10.1-546.1. Delivery of Agricultural Best Management Practices Cost-Share Program.

Districts shall locally deliver the Virginia Agricultural Best Management Practices Cost-Share Program described under §10.1-2128.1, under the direction of the Board, as a means of promoting voluntary adoption of conservation management practices by farmers and land managers in support of the Department's nonpoint source pollution management program. ….

4. Definitions:

"Agricultural products" means crops, livestock and livestock products, including but not limited to: field crops, forage, fruits, vegetables, horticultural specialties, cattle, sheep, hogs, goats, horses, poultry, furbearing animals, milk, eggs and furs.

"Agricultural production" means the production for commercial purposes of crops, livestock and livestock products, and includes the processing or retail sales by the producer of crops, livestock or livestock products which are produced on the parcel or in the District.

"Animal Type" means the type of livestock the BMP is being installed to treat. For reporting in the BMP Tracking Program, the following animal types are used.

Beef	Dairy	Swine	Layer	Sheep	Goat
Horse	Turkey	Broiler	Pullets	Other	

"Applicant" means a landowner, agent, or operator of record as long as the individual has control of the property. An applicant may be any corporation, association, partnership, or one or more individuals. Various companies, corporations, and partnership arrangements exist for farm ownership. Farm corporations (signing under Federal Tax Identification number) or partnerships operating under a farm name are classified as a single "applicant." Applicants are identified by a unique social security number and/or Federal Tax Identification number.

"Conservation Efficiency Factor (CEF)" means a factor calculated by the BMP tracking program to serve as a ranking tool and provide some guidance for ranking applications that would implement different BMPs. This tool is designed to assist SWCDs with the ranking of their cost share practice applications. The CEF uses nine different components, including soil loss data that is inputted by the SWCD, as well as the environmental information associated with the location of the practice on the earth to generate a factor used to rank the proposed practice compared with other like BMPs as well as different BMPs.

"District" or "local soil and water conservation district" or "SWCD" means a political subdivision of the Commonwealth organized in accordance with the provisions of the Code of Virginia contained in Chapter 5 of Title 10.1 (§ 10.1-500 et seq.) and with the powers and duties set out in Chapters 1, 5, 6, and 21.1 of Title 10.1 of the Code of Virginia.

"Drainage basins" for the purposes of funding allocations means the lands within the Chesapeake Bay watershed (CB – Chesapeake Bay) and the lands in the Commonwealth exclusively outside of the Chesapeake Bay watershed (OCB – Outside of Chesapeake Bay).

"Forestal production" means the production for commercial purposes of forestal products, and includes the processing or retail sales by the producer, of forestal products that are produced on the parcel. Forestal products include, but are not limited to; saw timber, pulpwood, posts, firewood, Christmas trees and other tree and wood products for sale or for farm use.

"Horticultural production" means the production for commercial purposes of horticultural products, and includes the processing or retail sales, by the producer, of horticultural products that are produced on the parcel. Horticultural products include, but are not limited to, fruits of all kinds, grapes, nuts, and berries, nursery and floral products for sale or for farm use.

"Total Maximum Daily Load" or "TMDL" means a calculation of a maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.

5. Allocation Process for Cost-share:

The process for determining the allocation of new cost-share includes the following steps:

A) Review the Appropriation Act language and determine the total amount available for cost-share and technical assistance in the given fiscal year provided from the:
   1. Nongeneral fund appropriation to the Virginia Natural Resources Commitment Fund from the recordation tax fee.
   2. Close of fiscal year general fund surplus appropriated to the Virginia Water Quality Improvement Fund (WQIF).
   3. WQIF and Virginia Natural Resources Commitment Fund Interest.
   4. The Reserve within the WQIF.

   (SEE **TABLE 1**)

B) Allocate portions of the funding to the CB and to OCB.

   (SEE **TABLE 2**)

C) Develop a cost-share spending plan that allocates appropriated funds to Program elements. (Determine uses of cost-share in CB and OCB Areas.)
   1. TMDLs
   2. TMDLs LEI – Livestock Exclusion Initiative
   3. RMP – Resource Management Plans
   4. CREP – Conservation Reserve Enhancement Program
   5. Other Agency BMP Programs
   6. Central Service Adjustments
   7. VACS – Virginia Agricultural Best Management Practices Cost-Share Program

   (SEE **TABLE 3**)

D) Use the Agricultural Nonpoint Source Hydrologic Unit (HU) Ranking Process to determine cost-share allocations to Districts.

   (SEE **TABLES 4-6 and Attachments A-E**)

<u>Review of Appropriation Act Language (Allocation Step A)</u>

For FY14, $23,749,115 in new funding (Item 360 H. and M. – see Part 2, Authority) is available for allocations to the Districts for cost-share and technical assistance.

For FY14, the following new funding is available:

TABLE 1: FY14 Cost-share and Technical Assistance Allocations by Fund Source

Funding Source	Total	Cost-share Portion of Total*	Technical Assistance Portion of Total*
Recordation Fee	$9,100,000	$7,900,000	$1,200,000
WQIF	$14,649,115	$13,477,186	$1,171,929
Fund and Subfund Interest	$0	$0	$0
WQIF Reserve	$0	$0	$0
TOTAL	$23,749,115	$21,377,186	$2,371,929

* Amounts rounded to the nearest dollar.

FORMULA 1 (TECHNICAL ASSISTANCE CALCULATION):
IF (Recordation Fee Appropriation x 0.08<1,200,000) THEN $TA_{Recordation}$ = $1,200,000
IF NOT THEN $TA_{Recordation}$ = RND (Recordation Fee Appropriation x 0.08)
TA_{WQIF} = RND (WQIF Appropriation for cost-share x 0.08)
$TA_{FY14\ Available}$ = $TA_{Recordation}$ + TA_{WQIF}

FORMULA 2 (COST-SHARE CALCULATION):
$CS_{Recordation}$ = Recordation Fee Appropriation - $TA_{Recordation}$
CS_{WQIF} = WQIF Appropriation for cost-share - TA_{WQIF}
$CS_{FY14\ Available\ before\ Spending\ Plan\ Adjustments}$ = $CS_{Recordation}$ + CS_{WQIF}

Allocation of Funding to the CB and to OCB Areas (Allocation Step B)

Sub-section 10.1-2128.1. B. of the Code of Virginia specifies that after technical assistance is removed that:

- Fifty-five percent of the total amount distributed to the Virginia Agricultural Best Management Practices Cost-Share Program shall be used for matching grants for agricultural best management practices on lands in the Commonwealth exclusively or partly within the CB watershed; and

- Thirty-seven percent of the total amount distributed to the Virginia Agricultural Best Management Practices Cost-Share Program shall be used for matching grants for agricultural best management practices on lands in the Commonwealth exclusively outside of the CB watershed.

This equates to a multiplier applied to the Cost-share Portion of Total of:
0.597826087 for CB [55/ (55+37)]; and
0.402173913 for OCB [37/ (55+37)]

For FY14, distributions within the CB and OCB shall be as follows:

TABLE 2: FY14 Cost-share Allocations by Drainage Basin and Fund Source

Funding Source	Total	Cost-share Portion of Total	Cost-share Portion Allocated to Lands Exclusively or Partly Within the CB*	Cost-share Portion Allocated to Lands Exclusively OCB*
Recordation Fee	$9,100,000	$7,900,000	$4,722,826	$3,177,174
Surplus	$14,649,115	$13,477,186	$8,057,013	$5,420,173
TOTAL	$23,749,115	$21,377,186	$12,779,839	$8,597,347

* Amounts rounded to the nearest dollar.

Spending Plan: Allocation of Appropriated Funds (Allocation Step C)

Out of the amounts available for cost-share, the Spending Plan shall allocate funding to BMP practices associated with specific program elements as follows:

TABLE 3: FY14 Cost-share Spending Plan by Drainage Basin and Fund Source

Program Element	Cost-share Portion Allocated to Lands Exclusively or Partly Within the CB (Recordation Fee)	Cost-share Portion Allocated to Lands Exclusively or Partly Within the CB (Surplus)	Cost-share Portion Allocated to Lands Exclusively OCB (Recordation Fee)	Cost-share Portion Allocated to Lands Exclusively OCB (Surplus)	Totals
Total Available	$4,722,826	$8,057,013	$3,177,174	$5,420,173	$21,377,186 ($CS_{FY14}$ Available before Spending Plan Adjustments)
Spending Plan Distribution:					
TMDLs	$0	$500,000	$0	$250,000	$750,000
TMDLs LEI	$0	$0	$0	$525,000	$525,000
RMP	$0	$60,000	$0	$40,000	$100,000
CREP	$0	$330,000	$0	$270,000	$600,000
Other Agency BMP Programs	$0	$0	$0	$0	$0
Central Service Adjustments	$0	$0	$0	$0	$0
VACS	$4,722,826	$7,167,013	$3,177,174	$4,335,173	$19,402,186 ($CS_{FY14}$ Available)

FORMULA 3 (COST-SHARE CALCULATION):

$CS_{FY14\ Available} = CS_{FY14 Available\ before\ Spending\ Plan\ Adjustments} - (TMDLs_{FY14\ Allocation} + TMDLs\ LEI_{FY14\ Allocation} + RMP_{FY14\ Allocation} + CREP_{FY14\ Allocation} + Other\ Agency\ BMP\ Programs_{FY14\ Allocation} + Central\ Service\ Adjustments_{FY14\ Allocation})$

NOTE: Funding provided to applicants for program elements outlined in the spending plan (See TABLE 3) other than VACS have no affect on applicant cost-share caps within VACS.

Specifics regarding the process by which such allocations are determined for each Program element within the spending plan are as follows:

Explanation of Spending Plan Distribution Components:

TMDLs (Allocation Step C1)

In FY14, $750,000 in funding is being provided to three of the four Districts that are implementing targeted TMDL plans:

Headwaters - Christians Creek and South River project, Moffett Creek and Middle River project, and Mossy Creek, Naked Creek and Long Glade Run project, all in Augusta County. (All CB) ($250,000)
Robert E. Lee - Falling River project in Campbell County, and Cub Creek in Appomattox County. (All OCB) ($250,000)
Piedmont - Spring Creek, Little Sandy River, Bush River, Briery & Saylers Creeks project in Amelia and Prince Edward County; Flat, Nibbs, Deep and West Creeks project in Amelia and Nottoway County. (All CB) ($250,000)
Blue Ridge - Upper Pigg River in Franklin County. (All OCB) (Continuing to expend existing balances)

NOTE: FY14 TMDL allocations – These dollars may be expended for noncommercial agricultural projects.

TMDLs LEI – Livestock Exclusion Initiative (Allocation Step C2)

A special livestock exclusion initiative was initiated with three Districts (all in OCB) for FY13 and FY14. The three Districts with special initiatives to receive additional cost-share in the amount of $525,000 in FY14 includes:

Halifax - Lower Banister River, Polecat Creek and Sandy Creek in Halifax County. ($175,000)
Patrick - Mayo River in Patrick County. ($175,000)
Pittsylvania - Upper Bannister River in Pittsylvania County. ($175,000)

NOTE: FY14 TMDL allocations – These dollars may be expended for noncommercial agricultural projects.

RMP – Resource Management Plans (Allocation Step C3)

In FY14, $100,000 ($60,000 CB; $40,000 OCB) is allocated to provide cost-share for Resource Management Plan (RMP) development to Districts to address TMDLs through the new Resource Management Plan Program. A fundamental goal of the Program pursuant to § 10.1-104.8 of the Code of Virginia is for the RMP plans to include "agricultural best management practices sufficient to implement the Virginia Chesapeake Bay TMDL Watershed Implementation Plan and other local TMDL water quality requirements of the Commonwealth". The intent of the program is to encourage farm owners and operators to voluntarily implement a high level of BMPs on their farmlands in order to be protective of water quality.

Potential Distribution Process (Final Plan to be developed prior to December 6, 2013 implementation date for RMP regulations)		
Plan Developer – RMP Development – Write plan for farmer – Submit plan to Review Authority for approval – Revise plan as necessary – Confirm Implementation – Submit package to Review Authority for verification and certification – Data Entry	Acres receiving manure that is generated collected and stored for mechanical application within the management unit. **$20 per acre (split payment)** – $15 upon plan approval by Review Authority – $5 upon certification of implementation by Review Authority	All other acres **$12 per acre (split payment)** – $9 upon plan approval by Review Authority – $3 upon certification of implementation by Review Authority

Soil and Water Conservation Districts are authorized to develop plans and recover costs in accordance with Item 360 E1 of the 2013 Appropriation Act. Payments for plan development by Districts on behalf of the cost-share applicant may be provided from cost-share.

> E.*1.* Notwithstanding § 10.1-552, Code of Virginia, Soil and Water Conservation Districts are hereby authorized to recover a portion of the direct costs of services rendered to landowners within the district and to recover a portion of the cost for use of district-owned conservation equipment. Such recoveries shall not exceed the amounts expended by a district on these services and equipment.

CREP (Allocation Step C4)

Initially, no funds were allocated to this program as the 2013 Appropriation Act specified in Item 360 B that "[i]t is the intent of the General Assembly that balances in Stormwater Management [Sub-program 50301] be used for the Commonwealth's statewide match for participation in the federal Conservation Reserve Enhancement Program. This meant that no new appropriations were available for use for FY14. It was recognized that as Farm Service Agency (FSA) sign-up for CREP was continuing and that the Commonwealth would need funding to make state-portion payments, the Department was authorized to transfer through a technical adjustment $600,000 from Subprogram 50323 to 50301. Thus $600,000 was placed in the spending plan in **TABLE 3**. Allocations to CB (55%) and OCB (45%) were made based on the proportion of program expenditures made between basins between 06/10/2000 and 06/30/2012.

Other Agency BMP Programs (Allocation Step C5)

Historically, payments periodically have been made to state agencies in accordance with Item 360 G of the 2013 Appropriation Act which states "[i]t is the intent of the General Assembly, that notwithstanding the provisions of § 10.1-2132, Code of Virginia, the Department of Conservation and Recreation is authorized to make Water Quality Improvement Grants to state agencies". No funds are allocated to this program element in FY14.

Central Service Adjustments (Allocation Step C6)

The Appropriation Act (Part 3: Miscellaneous) annually applies charges (interfund transfers) to each Agency for expenses incurred by central service agencies associated with Agency funds. For FY14 charges for nongeneral funds have been reduced to $0 so no funds are being set aside to address these required expenses.

VACS – Virginia Agricultural Best Management Practices Cost-Share Program Allocations (Allocation Step C7)

For FY14, after the other noted distributions have been met in the spending plan (SEE TABLE 3), there is $19,402,186 available for distribution as VACS cost-share. (Table 3 outlines the drainage basin split and fund sources.) Specific allocations to Districts in FY14 shall be made using science-based targeting of funds so that areas with the greatest potential to contribute agricultural nonpoint source pollution have the financial resources to implement BMP to reduce nutrient and sediment contamination of surface and ground waters. The process utilized to make these allocations is called the Agricultural Nonpoint Source Hydrologic Unit (HU) Ranking Process.

Agricultural Nonpoint Source Hydrologic Unit (HU) Ranking Process (Step D)

The Department utilizes a component of Virginia's Nonpoint Source Assessment to focus its cost-share allocations where funds can produce the greatest reductions in surface and ground water contamination. Every two years, the Department of Environmental Quality (DEQ) prepares a Virginia Water Quality Assessment Report, also known as the 305(b) report for submission to the Environmental Protection Agency. Accordingly, new data inputs that take into account BMPs implemented between 2008 and 2010 are being utilized and does result in changes in cost-share allocations to Districts. The 2010 version is being utilized for the FY14 cost-share allocations as no new nonpoint source (NPS) assessment was included in the 2012 305(b) draft report

that remains under review by U.S. Environmental Protection Agency. A new NPS assessment is being prepared as part of 2014 report development. That assessment may be utilized in the FY15 allocation development. The Department utilizes the agricultural component of the most current and approved NPS assessment to focus agricultural cost-share funds.

Hydrologic unit assessment scores are calculated using a nonpoint pollutant load simulation model and data developed by the Department and the Virginia Tech, Department of Biological Systems Engineering. The model includes statewide data from:

- Detailed land use from interpreted imagery supplemented with tillage practice data
- Census of Agriculture data
- Virginia Agriculture Statistics
- Grazing and manure application practices
- Hydrologic soil groups
- Average water content and K factors of all soils
- Stream flows from gauge stations
- Climate records from a multi-state area, growing seasons
- Dominant crop types by hydrologic unit
- CB Watershed Model output
- Animal numbers by type and location
- Distribution and extent of agricultural conservation practices
- Slope and manure application schedules by manure types

Additional technical information regarding modeling processes are set out in Department documents titled:
2010 NPS Assessment and Prioritization Primer
Nonpoint Source Assessment and Prioritization: 2010 Prioritization Documentation

The computer model estimates and ranks the pollutant loads of nitrogen, phosphorus, and sediment in each of the 1,247 6th-order hydrologic units of the National Watershed Boundary Dataset (NWBD). Each of the three pollutant loads are sorted High to Low and assigned their sort order for each HU. The rank score of a HU is the sum of these three values. For example:

Hydrologic Unit (HU) – (VAHU6)	Pollutant Load –Nitrogen (NSEQ)	Pollutant Load – Phosphorus (PSEQ)	Pollutant Load – Sediment (SSEQ)	Sum (NSEQ + PSEQ + SSEQ)	Agricultural Pollutant Potential Rank
JL37	1,196	1,212	1,200	3,608	High (H)
PS03	896	997	956	2,849	Medium (M)
YO68	497	376	936	1,809	Low (L)

The higher the composite ranking score, the higher its potential to contribute agricultural NPS pollution (based on Nitrogen, Phosphorus, and Sediment loads). In accordance with this process, **Attachment A** includes the Unit Area Loads for Nitrogen (kg/ha-yr), Phosphorus (kg/ha-yr), and Sediment (mt/ha-yr); the Sorted Sequence (Rank Order) between HUs for each pollutant's load; a Sum Order for each HU; and the resulting Agricultural Pollutant Potential Rank for each HU to be utilized in FY14 cost-share allocation computations.

The Department has designated the highest 20% of the ranked composite scores as High (H) potential, the middle 30% as Medium (M), and the lowest 50% are ranked Low (L) for their potential to contribute agricultural NPS pollution (natural breaking points in the data are looked for around these percentiles).

For FY14 (see **Attachment A**) the data breaks were as follows:

TABLE 4: Agricultural Pollutant Potential Ranking

Agricultural Pollutant Potential Rank	# of HUs included	% of HUs included	Sum Order Range
H	240	19.24619	2865 - 3608
M	383	30.71371	1821 - 2849
L	624	50.04010	3 - 1809
Total	1247	100.00000	

NOTE: Since the installation and distribution of BMPs implemented is part of the calculation of the agricultural NPS ranking, the hydrologic units tend to change rankings if a large number of BMPs are implemented in a particular HU during the two years that the rankings are used. This tends to shift the funds between the HUs. Hydrologic units ranked H in one NPS assessment may receive a rank of M or L in the next NPS assessment due to the large number of BMPs implemented in the H ranked hydrologic units.

The next step is to compile the HU area (hectares or ha) designated as H, M, and L by county and then District geographic areas. Hydrologic unit boundaries are based upon naturally occurring drainage divides and do not often reflect county boundaries. As a result, any HU may be fully contained within a county or divided between two or more counties. Geographic Information System analysis allows the area (ha) of each ranked HU (H, M, and L) within a county boundary to be calculated and compared to the total number of ha of that pollutant ranking (H, M, and L) within each drainage basin (CB or OCB). The county area (ha) designated as H, M, and L are then rolled up to the 47 Districts. (Those HUs not within a District boundary have been removed from the analysis and do not contribute to the acreage total utilized in calculating the Cost-share Multiplier.)

Some Districts reside in the CB, some are located in only OCB areas, and some contain acreage in each. District drainage basin assignments are outlined in **Attachment B**.

Once a composite area (ha) for H, M, and L HUs has been calculated for each District by drainage basin, a H, M, and L cost-share multiplier based on percentage of ha in the District (for H, M, and L) compared to the drainage basin total (for H, M, and L) is calculated and then applied respectively to the amount of cost-share funding allocated to the H, M, and L pollutant load categories in the CB and OCB areas. This analysis is set out in **Attachment C**. **Attachment C** provides data by Drainage Basin (CB and OCB), District, Agricultural Pollutant Potential Rank (H, M, and L), Total Area (ha) of Hydrologic Units in each District by Agricultural Pollutant Potential Rank and Drainage Basin, and the resulting Percentage Rank (Cost-share Multiplier).

Attachment D provides a full-page version of the image below depicting the statewide distribution of H, M, and L HUs by District and Drainage Basin.

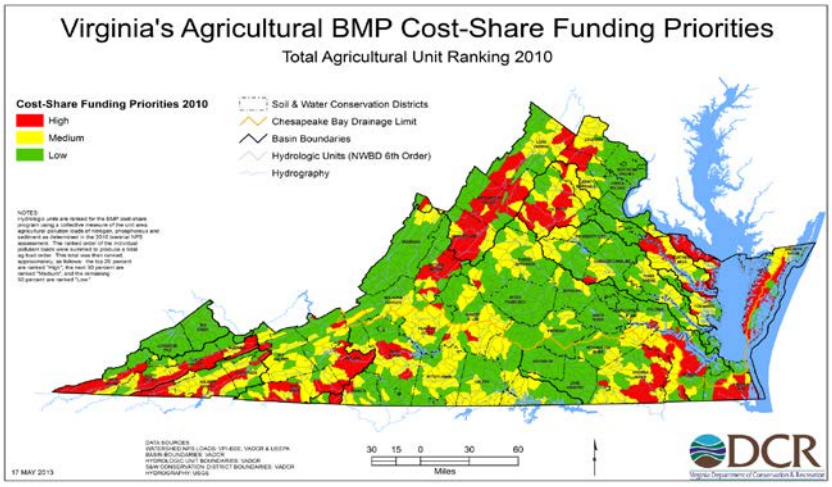


FIGURE 1: Virginia's Agricultural BMP Cost-share Funding Priorities

Utilizing the information in **Attachment C**, the next step is to determine how much of the available cost-share by drainage basin and funding type will be proportioned to H, M, and L HU areas (ha). Percentage allocations are based on providing a high percentage of the funding to the waters with the most pollutant load based on nitrogen, phosphorus, and sediment. For FY14, the H ranked HUs are assigned 55 percent of the cost-share funds. The M ranked HUs are assigned 30 percent of the cost-share funds while the L ranked HUs are assigned 15 percent of the cost-share funds.

In FY15, the allocation percentages shall be adjusted to 60:30:10 in order to complete a shift towards the allocation of cost-share to those waters in the Commonwealth shown by the HU analysis to have the most pollutant loads for nitrogen, phosphorus, and sediment.

> NOTE: Based upon comments from the Soil and Water Conservation Districts regarding the capacity of the HU process to rank waters with TMDLs, the Department did assess whether the analysis (water quality targeting) could be improved by placing additional emphasis on nonpoint TMDLs. The Department found that over 80% of the land area of the Commonwealth (visual assessment of map) is within a non-shellfish non-point source TMDL (See TMDL map below). At this time, the only metric available would be to include a column indicating whether the HU is within a nonpoint TMDL or not as actual levels of bacterial impairments do not exist. Due to the wide distribution of TMDLs, it was determined that this would provide little additional water quality targeting value. Accordingly, the model's existing emphasis on animal units and manure application outlined in the bullets above appears to properly weigh agricultural water quality impacts and is the best available data at this time. However, the Department does recommend that bacteria be considered by DEQ in development of the 2016 model as it would likely take several years to properly develop and calibrate a nonpoint TMDL model component for bacteria through which TMDL's in various HUs could be compared as to levels of water quality impact.

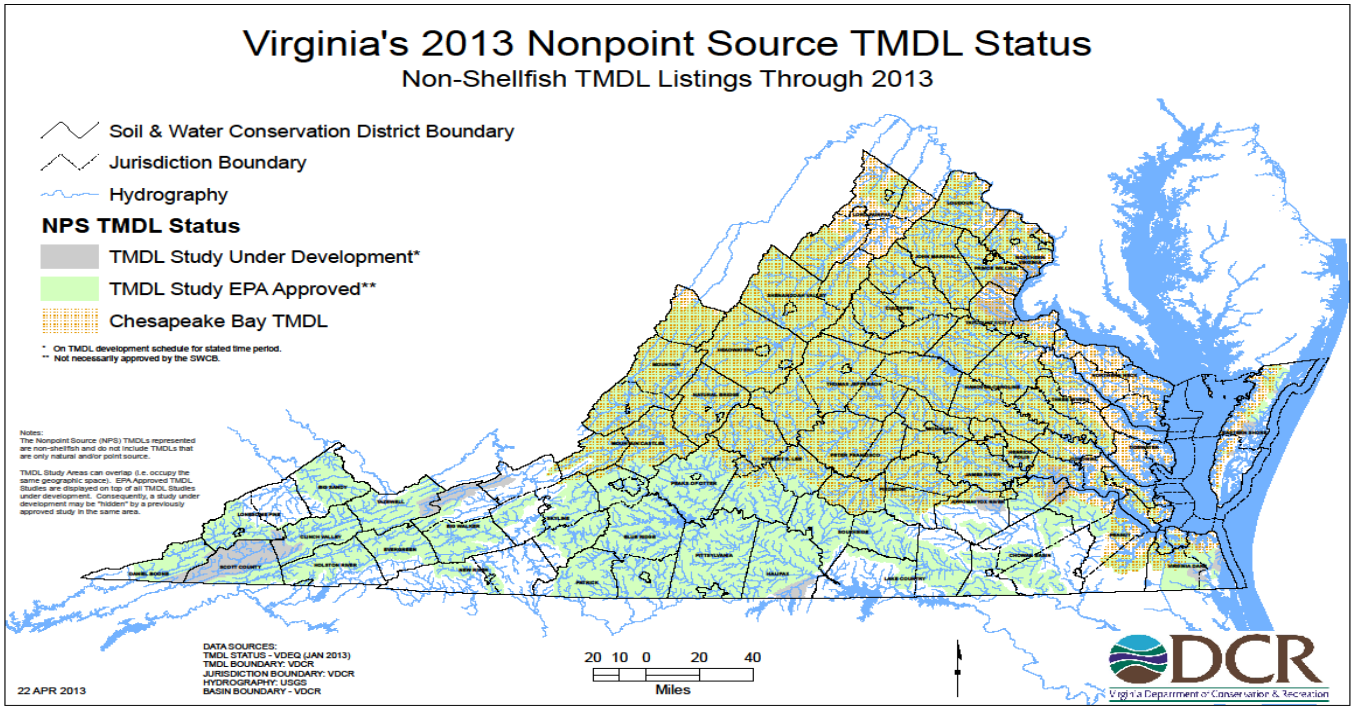


FIGURE 2: Virginia's 2013 Nonpoint Source TMDL Status

TABLE 5: FY14 Cost-share Allocations by Drainage Basin; Fund Source; and H, M, and L HU Areas

Program Element	Cost-share Portion Allocated to Lands Exclusively or Partly Within the CB (Recordation Fee)	Cost-share Portion Allocated to Lands Exclusively or Partly Within the CB (Surplus)	Cost-share Portion Allocated to Lands Exclusively OCB (Recordation Fee)	Cost-share Portion Allocated to Lands Exclusively OCB (Surplus)	Totals
VACS (after spending plan distributions – see TABLE 3)	$4,722,826	$7,167,013	$3,177,174	$4,335,173	$19,402,186
H (55%)	$2,597,554	$3,941,857	$1,747,446	$2,384,345	$10,671,202
M (30%)	$1,416,848	$2,150,104	$953,152	$1,300,552	$5,820,656
L (15%)	$708,424	$1,075,052	$476,576	$650,276	$2,910,328

The H, M, and L multipliers for each District are then applied to the amount of cost-share funds being made available in each drainage basin (CB and OCB) and funding source (Surplus or Recordation fee) as set out in **TABLE 5**. Each District's drainage basin's H, M, and L funds are then accumulated to provide a total funding amount for the cost-share allocation. **Attachment E** shows the resulting District allocations by drainage basin and funding source.

The following table shows FY14 District cost-share allocations further compiled by drainage basin and under the grand total column, provides the cumulative cost-share allocations to each of the Districts.

TABLE 6: FY14 District Cost-share Allocations by Drainage Basin

SWCD	CB Total	OCB Total	FY14 Grand Total
APPOMATTOX RIVER	$21,600	$88,224	$109,824
BIG SANDY	$0	$71,413	$71,413
BIG WALKER	$0	$234,939	$234,939
BLUE RIDGE	$11,731	$501,072	$512,803
CHOWAN BASIN	$0	$773,461	$773,461
CLINCH VALLEY	$0	$308,711	$308,711
COLONIAL	$304,963	$0	$304,963
CULPEPER	$1,252,147	$0	$1,252,147
DANIEL BOONE	$0	$351,214	$351,214
EASTERN SHORE	$459,466	$363,471	$822,937
EVERGREEN	$0	$195,422	$195,422
HALIFAX	$0	$181,239	$181,239
HANOVER-CAROLINE	$284,231	$0	$284,231
HEADWATERS	$1,009,476	$0	$1,009,476
HENRICOPOLIS	$44,450	$0	$44,450
HOLSTON RIVER	$0	$301,383	$301,383
JAMES RIVER	$157,283	$41,058	$198,341
JOHN MARSHALL	$548,247	$0	$548,247
LAKE COUNTRY	$0	$241,370	$241,370
LONESOME PINE	$0	$160,395	$160,395
LORD FAIRFAX	$887,398	$0	$887,398
LOUDOUN	$327,343	$0	$327,343
MONACAN	$136,565	$0	$136,565
MOUNTAIN	$327,204	$0	$327,204
MOUNTAIN CASTLES	$217,760	$30,367	$248,127
NATURAL BRIDGE	$599,833	$0	$599,833
NEW RIVER	$0	$566,453	$566,453
NORTHERN NECK	$945,639	$0	$945,639
NORTHERN VIRGINIA	$65,003	$0	$65,003
PATRICK	$0	$187,422	$187,422
PEAKS OF OTTER	$49,207	$215,328	$264,535
PEANUT	$613,908	$286,077	$899,985
PETER FRANCISCO	$135,564	$0	$135,564
PIEDMONT	$207,498	$23,534	$231,032
PITTSYLVANIA	$0	$249,038	$249,038
PRINCE WILLIAM	$69,969	$0	$69,969
ROBERT E. LEE	$281,097	$200,616	$481,713
SCOTT COUNTY	$0	$411,674	$411,674
SHENANDOAH VALLEY	$1,121,716	$0	$1,121,716
SKYLINE	$5,265	$693,256	$698,521
SOUTHSIDE	$42	$176,890	$176,932
TAZEWELL	$0	$256,470	$256,470
THOMAS JEFFERSON	$677,927	$0	$677,927
THREE RIVERS	$509,102	$0	$509,102
TIDEWATER	$376,728	$0	$376,728

TRI-COUNTY/CITY	$170,460	$0	$170,460
VIRGINIA DARE	$71,017	$401,850	$472,867
Grand Total	$11,889,839	$7,512,347	$19,402,186

NOTE: The distribution of cost-share allocations is dependent on income and state finances. See the procedure outlined in Part 13: Criteria for Cost-share and Technical Assistance for what procedures are implemented should funding availability fall short of appropriation projections.

6. Director Approved Transfer of Cost-share Prior to Reallocation

After Grant Agreement issuance but prior to reallocation, Districts may choose to work with the Department to determine if cost-share allocations should be transferred from one District to another District to maximize water quality improvements. Cost-share shall not be transferred between CB and OCB drainage allocations. Recommended adjustments shall be advanced by Department field personnel through the Division's Central Office to the Director or his designee for consideration as District contract adjustments. Written correspondence from the affected Districts will be required to document their approval of the recommended transaction. Adjustments should await the March 31, 2014 reallocation process unless lack of technical delivery staffing, limited cost-share award opportunities, or other beneficial water quality objectives within a District or between Districts merits an earlier reallocation. Written correspondence regarding reallocations shall be routed to the Comptroller to update the Department's records. It will be the decision of the Comptroller regarding how the monies are transferred.

Additionally, should a District decline a recommended cost-share allocation, technical assistance allocations may also be reduced accordingly if such an allocation has been recommended. Otherwise, no other movements of cost-share or technical assistance funding may occur between Districts.

7. Targeting the Expenditure of Cost-share Funds in each District to Maximize Water Quality Improvements

Once cost-share has been allocated to Districts, cost-share expenditures within Districts, in accordance with the VACS mission (See Part 2), should be targeted towards maximizing nutrient and sediment reductions by implementing the most cost-effective BMPs possible in locations that achieve the greatest pollutant reductions on a field by field basis. The VACS Program gives Districts the responsibility to determine the recipients of state cost-share funds. The better the Districts recruit and evaluate applications, the more successful the local program will be at improving local water quality. Participants are to be recruited based upon those primary and secondary factors, which most influence their existing land uses impact upon water quality. The objective of the VACS Program is to solve water quality problems by fixing the worst problems first on a field by field basis. The 2010 agricultural non-point source ranking of the National Watershed Boundary Database (VAHU6) currently provides the most accurate identification at a landscape scale, of the lands with the greatest potential to contribute agricultural non-point source pollution into Virginia's rivers and streams.

NOTE: The Department shall review, along with stakeholders, Department primary and District secondary criteria utilized for project selection and consider developing a more standardized set of criteria and process through which cost-share might be better directed to improve water quality while still providing District flexibility.

NOTE: The BMP Technical Advisory Committee (TAC) shall also be charged with developing recommendations regarding the state cost-share rates for approved BMPs with the intent of developing reduced rates for standard operating practices in order to allow cost-share dollars to be spread further but for the state to still be able to continue to collect BMP usage information. Additionally, the TAC should examine acreage caps for agronomic practices and the allowable duration of payments for certain practices.

Statewide water quality considerations must be used by all Districts to qualify cost-share applications for District Board consideration for funding. Districts should prioritize the implementation of appropriate BMPs that will reduce the greatest amount of nutrient and sediment contamination while utilizing the least amount of cost-share funds to address site-specific water quality problems in identified H priority watersheds with all program cost-share funds. Any application that does not meet at least one of these priority considerations listed below shall not receive funding:

- The project is located in one of the District's highest ranked hydrologic units unless the project is for animal waste management practices and actions to protect groundwater, gully erosion, or critical areas utilizing one of the following practices:
  - Animal Waste Control Facilities (WP-4)
  - Loafing Lot Management System (WP-4B)
  - Composter Facilities (WP-4C)
  - Permanent Vegetative Cover on Critical Areas (SL-11)
  - Stream Protection (WP-2)
  - Vegetative Stabilization of Marsh Fringe Area (SE-1)
  - Nutrient Management Plan Writing (NM-1A)
  - Water Table Control Structure (WQ-5)
  - Sod Waterway (WP-3)
  - Small Grain Cover Crop for Nutrient Management (SL-8B)
  - Stream Exclusion with Grazing Land Management (SL-6)
  - Grass Filter Strips (WQ-1)
  - Sediment Retention, Erosion or Water Control Structure (WP-1)
- The project is located within or upstream of an identified TMDL stream segment and the project will assist in reducing the identified pollutant.
- The project is located on fields that are at least 1/3 HEL (Highly Erodible Land) soils.
- The project is part of comprehensive conservation planning including resource management planning for the entire farm or tract (as appropriate).

A further set of Secondary considerations that identify the local District Board's water quality improvement focus shall be developed by the District Board and shall be approved by the Department prior to the beginning of the fiscal year. These secondary considerations should be easily understood by any potential participant. Districts should focus on describing the Boards desired local water quality improvements. Secondary considerations should be narrative statements that assist District Boards in ranking cost-share applications based upon which practice implementation will provide the greatest amount of local water quality improvement. The District shall be expected to abide by these policies throughout the entire program year so that each application is ranked to receive funding based upon the anticipated water quality benefits. Examples of potential secondary considerations may be found in the *Program Year 2014 Virginia Agricultural Cost Share (VACS) BMP Manual*.

One key secondary consideration that shall be considered by each District when comparing projects for cost-share funding as a component of their decision process is the CEF. A CEF is calculated by the Agricultural BMP Tracking program and uses nine different components, including soil loss data that is input by the District, as well as the environmental information associated with the location of the practice to generate a factor that can be used to rank the proposed practice compared with other like BMPs as well as different BMPs (See TABLE 7). Although the CEF can be used to rank different BMPs it will more accurately rank different BMPs that are oriented toward reduction of the same contaminate with the lower the value the more preferred the project.

Additionally, for Districts within the CB, Districts shall give priority to BMPs addressed within the Virginia Chesapeake Bay Watershed Implementation Plan and for Districts OCB, priority shall be given to BMPs in the highest priority agricultural TMDL watersheds (as ranked by the Department; H, M, and L).

The relative weights of **TABLE 7** reflect the weight distribution of the CEF components for practices where every component is used in the final CEF calculation. For many practices one or more of these components is not used and the relative weights of the point variables that are used will therefore be proportionally increased. Details on this procedure may be found in a Department discussion document titled *Assignment of Priority Values to BMP Instances at the Time of District ACSTP Data Entry*.

TABLE 7: CEF Ranking Components and Values

Ranking Component	Relative Weight	Value Range	Point or Credit Variable	Assigned Rank Points
Deliverable Sediment Reduction Cost Efficiency	13.33	not calculated / equation results	DSEDXCE_P	0 / 1 - 10
Priority Practice	17.33	yes / maintenance / no	PRIPRAC_P	1 / 9 / 13
NPS Priority Hydrologic Unit	17.33	not used / Ag Priorities SUM Order	NPSAG_P	0 / 1 - 13
NPS Bio Priority HU	5.33	2+ flags / 1 flag / none	NPSBIO_C	-4 / -2 / 0
Bacteria TMDL Area	7.93	not used / 3 / 1 / 0	BTMDL_P	0 / 1 / 1 / 6
Nutrient TMDL Area	7.93	not used / 3 / 2 / 0	NTMDL_P	0 / 1 / 1 / 6
Chesapeake Bay Program Efficiency	4.0	>50% / 35-50% / <35% / not reportable	CBEFF_C	-3 / -2 / -1 / 0
Practice Contract Period	6.61	1 - 10	PCP_P	1 - 5
Installation Cost Efficiency	20.0	not calculated / equation results	ICE_P	0 / 1 - 15
Environmental Preferences	see discussion document	not calculated / equation results	ENV_C	0 / -7 - 0

Final approval of practice funding is the responsibility of the local District Board of Directors. All actions taken must be voted upon and the outcome recorded in the minutes of the meeting where such action is taken. Districts should be prepared to verify and document that their cost-share allocations are being spent in accordance with their priority and secondary considerations and in accordance with the *Program Year 2014 Virginia Agricultural Cost Share (VACS) BMP Manual*.

Any application must meet appropriate technical agency standards and specifications of that practice before cost-share payment is made. Payment is issued after the participant and technical representative have certified practice installation in their Virginia BMP Incentives Contract. The amount of the cost-share payment is calculated based upon the estimated cost or total actual cost whichever is less. When completed practices are scheduled for combined funding from a District and other sources, the District cost-share payment must reflect the balance due (not to exceed the amount approved by the District for the cost-share payment) after payment has been approved or issued by the other sources. Total combined state VACS, federal, and any other funding source cost-share payments must not exceed 90% of the actual eligible total cost unless otherwise explicitly

allowed within the *Program Year 2014 Virginia Agricultural Cost Share (VACS) BMP Manual* or by written directive of the Director.

Department personnel will confer with District staff at least quarterly to determine their projected needs for cost-share payments for completed and certified BMPs. Department personnel will generate a disbursement letter based upon the projected needs and Agricultural BMP Tracking program data showing approved and completed practices.

8. Cost-share Funding Caps

For FY14, the VACS applicant cost-share limit or "cap" is $50,000/applicant/year. This cap is automatically monitored for any applicant across Districts based upon data available from within the Agricultural BMP Tracking program.

- Except that WP-4 and/or WP-4B either as a single large practice or as an aggregation of smaller practices may be approved to receive up to $70,000 in cost share funds in any given program year. For any single or aggregation of WP-4 and/or WP-4B practices that receive greater than $50,000 in cost share funds but less than $70,000, the unused cap amount may not be used to fund any other additional practices.
- SL-6 is not subject to the $70,000 cap as the practice shall be paid at 100%; however, participants receiving cost-share funds for SL-6 in excess of $70,000 in FY14, shall not be eligible for any additional cost-share funds for any other cost-share practices.
    - Examples:
    - If SL6 payment is equal to or greater than $70,000 then no additional VACS is allowed.
    - If SL6 is $60,000, then $10,000 would remain available for WP-4 and/or WP-4B but $0 for other VACS practices.
    - If SL6 is $40,000, then $10,000 would remain available for agronomic practices or up to $30,000 for WP-4 and/or WP-4B.
- RMP development does not count against or otherwise affect an applicant's annual cost-share cap for other specified practices.

State participant caps are based upon the fiscal year that the practice is approved rather than the fiscal year in which the cost-share payment is distributed. This allows each participant to maximize the amount of cost-share that they may receive in each fiscal year.

The Department is marketing the SL-6 program at 100% for FY14 and FY15 after which time the cost-share percentage will be reduced. All participant enrollments received during this two-year period will be honored as cost-share funds become available even if enrollment outpaces available funding during that time.

9. Reallocation of Cost-share

On April 1, 2014, following the end of the third quarter, the Department shall reallocate (redistribute) unobligated VACS allocations (keeping cost-share within the drainage basin it was originally allocated within) in an effort to satisfy existing unfunded cost-share applications statewide. VACS funds that have not been approved by the District's Board of Directors at the end of the third quarter of the fiscal year (March 31, 2014) to fund an existing cost-share application are considered to be unobligated.

Data collected from the budget summary page of the Virginia Agricultural BMP Tracking Program (Tracking Program) on April 1, 2014 will be analyzed to identify those Districts that have obligated ninety percent (90%) or more of their Total VACS allocation. The percent of their VACS allocation obligated will be identified by dividing the "Allocation" amount by the "Approved" amount. For those Districts that did not obligate at least

ninety percent (90%) of their Total VACS allocation by April 1, 2014, unobligated cost-share funds will be summed and all of a District's unobligated VACS funds will be reallocated, except that ten (10%) of the unobligated balance shall remain with the District to approve small practices or to make adjustments to existing cost-share practices. This includes amounts already distributed to Districts for which a project has since been discontinued (which shall be reverted back to the Department at the Department's direction) as well as VACS funds still being held by the Department for which there are no pending obligations against it. Technical assistance funding shall not be reallocated and shall remain with the District to which it was originally allocated.

All reallocated cost-share funds shall be allocated to BMP Tracking Program identified **priority** agricultural BMP practices with the lowest CEF factors within the original drainage allocations. Should a CEF factor tie result when selecting projects, the Department will select the practice(s) with the greater longevity to break any ties.

Reallocated cost-share funds will not have technical assistance attached.

10. Allocation Process for Technical Assistance:

Technical Assistance funds are made available to Districts by the Department for VACS Program implementation by District technical staff. FY13 technical assistance fund allocations approved in the amount $1,843,154 represent a base allocation for FY14 for technical assistance. This base (or constant) represents a level at which Districts have indicated they can adequately deliver services. The base amount of $1,843,154 is subtracted from the total technical assistance available in FY14 ($2,371,929) and results in a technical assistance balance of $528,775. This remaining balance is distributed proportionally to the allocation of 2014 cost-share to Districts (a ratio established in the relationship of $CS_{FY14\ District\ Z} / CS_{FY14\ Available}$ as noted in the formula below). A formula outlining the calculation process is set out below with input variables and results for FY14 (Total Technical assistance allocations by District) presented in **TABLE 8**. In future years, should technical assistance amounts available fall below the $1,843,154 base level, total technical assistance to Districts would be proportionally reduced.

FORMULA 4 (TECHNICAL ASSISTANCE CALCULATION):

If $TA_{FY14\ Available}$ is > $TA_{FY13\ Base\ Total}$ then:

$TTA_{FY14\ District\ Z} = [(TA_{FY14\ Available} - TA_{FY13\ Base\ Total}) \times (CS_{FY14\ District\ Z} / CS_{FY14\ Available})] + TA_{FY13Base\ District\ Z}$

Where $TA_{FY14\ Available}$ = $2,371,929 (See FORMULA 1)

$TA_{FY13\ Base\ Total}$=$1,843,154 (Constant)

$CS_{FY14\ Available}$ = $19,402,186 (See FORMULA 3)

See **TABLE8** for input variables

If $TA_{FY14\ Available}$ is ≤ $TA_{FY13\ Base\ Total}$ then:

$TTA_{FY14\ District\ Z} = TA_{FY14\ Available} \times (TA_{FY13Base\ District\ Z} / TA_{FY13\ Base\ Total})$

Where $TA_{FY13\ Base\ Total}$=$1,843,154 (Constant)

See **TABLE8** for input variables

TABLE 8: FY14 Technical Assistance Computations and District Allocations

SWCD	$CS_{FY14\ District\ Z}$	$CS_{FY14\ District\ Z} / CS_{FY14\ Available}$	$(TA_{FY14\ Available} - TA_{FY13\ Base\ Total}) \times (CS_{FY14\ District\ Z} / CS_{FY14\ Available})$	$TA_{FY13Base\ District\ Z}$	$TTA_{FY14\ District\ Z}$ (FY14 Total Technical Assistance Allocated)
APPOMATTOX RIVER	$109,823	0.0056603625	$2,993	$25,899	$28,892
BIG SANDY	$71,413	0.0036806585	$1,946	$8,723	$10,669
BIG WALKER	$234,939	0.0121088683	$6,403	$34,600	$41,003
BLUE RIDGE	$512,803	0.0264301719	$13,976	$50,000	$63,976
CHOWAN BASIN	$773,461	0.0398646436	$21,079	$30,369	$51,448
CLINCH VALLEY	$308,711	0.0159111635	$8,413	$70,000	$78,413
COLONIAL	$304,963	0.0157179629	$8,311	$40,000	$48,311
CULPEPER	$1,252,147	0.0645363677	$34,125	$105,000	$139,125
DANIEL BOONE	$351,214	0.0181017626	$9,572	$49,800	$59,372
EASTERN SHORE	$822,937	0.0424146554	$22,428	$51,000	$73,428
EVERGREEN	$195,422	0.0100721416	$5,326	$19,300	$24,626
HALIFAX	$181,239	0.0093411609	$4,939	$32,600	$37,539
HANOVER-CAROLINE	$284,231	0.0146494194	$7,746	$74,250	$81,996
HEADWATERS	$1,009,476	0.0520289927	$27,512	$38,297	$65,809
HENRICOPOLIS	$44,450	0.0022909692	$1,211	$7,570	$8,781
HOLSTON RIVER	$301,383	0.0155334532	$8,214	$69,000	$77,214
JAMES RIVER	$198,341	0.0102226093	$5,405	$16,372	$21,777
JOHN MARSHALL	$548,247	0.0282569619	$14,942	$32,000	$46,942
LAKE COUNTRY	$241,370	0.0124403364	$6,578	$17,000	$23,578
LONESOME PINE	$160,395	0.0082668519	$4,371	$27,329	$31,700
LORD FAIRFAX	$887,398	0.0457370356	$24,185	$100,000	$124,185
LOUDOUN	$327,343	0.0168714556	$8,921	$46,000	$54,921
MONACAN	$136,565	0.0070386441	$3,722	$16,000	$19,722
MOUNTAIN	$327,204	0.0168642715	$8,917	$0	$8,917
MOUNTAIN CASTLES	$248,127	0.0127886180	$6,762	$35,000	$41,762
NATURAL BRIDGE	$599,833	0.0309157231	$16,347	$32,221	$48,568
NEW RIVER	$566,453	0.0291953244	$15,438	$50,000	$65,438
NORTHERN NECK	$945,639	0.0487387856	$25,772	$100,742	$126,514
NORTHERN VIRGINIA	$65,003	0.0033503064	$1,772	$0	$1,772
PATRICK	$187,422	0.0096598301	$5,108	$13,500	$18,608
PEAKS OF OTTER	$264,535	0.0136342826	$7,209	$28,742	$35,951
PEANUT	$899,986	0.0463857855	$24,528	$69,000	$93,528
PETER FRANCISCO	$135,564	0.0069870288	$3,695	$23,601	$27,296
PIEDMONT	$231,032	0.0119075198	$6,296	$23,790	$30,086
PITTSYLVANIA	$249,038	0.0128355867	$6,787	$29,300	$36,087
PRINCE WILLIAM	$69,969	0.0036062230	$1,907	$6,343	$8,250
ROBERT E. LEE	$481,713	0.0248277696	$13,128	$11,930	$25,058
SCOTT COUNTY	$411,674	0.0212179197	$11,220	$45,800	$57,020
SHENANDOAH VALLEY	$1,121,716	0.0578139132	$30,571	$45,600	$76,171

SKYLINE	$698,521	0.0360022042	$19,037	$55,433	$74,470
SOUTHSIDE	$176,932	0.0091191651	$4,822	$24,790	$29,612
TAZEWELL	$256,470	0.0132186131	$6,990	$30,122	$37,112
THOMAS JEFFERSON	$677,927	0.0349407789	$18,476	$97,399	$115,875
THREE RIVERS	$509,102	0.0262394273	$13,875	$70,375	$84,250
TIDEWATER	$376,728	0.0194167781	$10,267	$27,595	$37,862
TRI-COUNTY/CITY	$170,460	0.0087856081	$4,646	$25,200	$29,846
VIRGINIA DARE	$472,868	0.0243718885	$12,887	$35,562	$48,449
Grand Total	$19,402,186	1.0000000000	$528,775	$1,843,154	$2,371,929

NOTE: In FY14, the Department, pursuant to the Virginia Soil and Water Conservation Board's May 9, 2013 Policy on Soil and Water Conservation District Administration and Operations Funding Allocations for FY14 and the associated Grant Agreement will analyze base-budget technical assistance information submitted on the Grant Agreement's Attachment D (Itemized District Budget Request Form) to see if District base technical assistance needs further adjustments. Absent a re-benchmarking, technical assistance in future years would be distributed in the manner established within this Policy.

FY14 Technical Assistance allocations (See **TABLE 8**) shall be disbursed to Districts in accordance with the following procedures. During the first quarter of FY14, after the Fourth Quarter FY13 reports have been submitted to the Department and the Grant Agreement has been executed and the original signed Agreement returned to the Department, fifty percent of the Technical Assistance allocations shall be awarded; with an additional twenty-five percent awarded each at the beginning of the second quarter and at the beginning of the third quarter provided updates to the BMP cost-share tracking database are being regularly made to the satisfaction of the Department.

During cost-share reallocation, unexpended technical assistance shall remain in the District to which it was first allocated and shall not be subject to reallocation.

11. Noncompliance with this policy:

In the event any District fails to comply with the provisions of this Policy, the Department reserves the right to require repayment of previously issued funds and/or direct further appropriate actions based upon noncompliance circumstances. Should an issue arise that impacts funding, the affected District(s) will be apprised of the issue(s) and provided an opportunity to address the concerns to the Department prior to Department action**.**

12. Unexpended State Funds Maintained by Districts:

Cost-share funds issued to Districts that remain unobligated at the close of FY13 will remain in the District's account(s). FY14 cost-share distributions to a District shall be reduced by the amount of unobligated cost-share and the resulting balance shall become available during FY14 reallocation or through other addendum agreements. FY13 Technical Assistance shall not be subject to reversion or reallocation. However, it is unadvisable for any District to accumulate more than about six months of Technical Assistance funds in accordance with advice from District auditors. Public funds from local, state and federal sources are provided to Districts not for savings, but for performance of conservation. The Department will monitor the growth of unexpended funds through grant agreement required audit reports and report situations. The Department may reduce future funding to Districts that fail to act upon guidance and recommendations from auditors and the Department. Decisions and Department actions will be addressed on a case-by-case basis working with the affected District.

13. Criteria for Cost-share and Technical Assistance:

Funding allocated to Districts as cost-share and technical assistance is contingent upon appropriations by the General Assembly. Should funding availability fall short of appropriation projections during the course of FY14, every District will receive an equal percent reduction which will be calculated and deducted from each District's unobligated total approved cost-share and technical assistance funding specified within the Department/District Grant Agreement. When a reduction of funds is necessary, the Department will make reductions from available unobligated cost-share first and reduce technical assistance last. Should a reduction of funds occur, every District must return funding within 30 days of receiving notice of such reduction from the Department. Should all cost-share and technical assistance funding within a District be obligated and it becomes necessary to reduce such funds, then adjustments will be made to the next fiscal year's spending plan to honor existing commitments from the prior fiscal year first or during reallocation as determined by the Department. See **Attachment E** for fund source allocations for cost-share and **TABLE 8** for fund source allocations for technical assistance.

In the event a new District is formed or an existing District alters its boundaries, the Board will examine the total financial resources under its control and its priorities for use of these funds and adhere to its Policy titled Financial Commitments For Establishment of a New Soil & Water Conservation District (SWCD/district), or Realignment of an Existing District on all funding decisions in this Policy. The newly created or altered District may be funded at a reduced level, or may be required to share funding in an arrangement determined by the Board until sufficient funding is made available to fulfill provisions of this policy and priorities of the Board.

Expenditure of District funds, regardless of source, will be made without regard to any person's race, color, religion, sex, age, national origin, handicap, or political affiliation.

All funds received by Districts are public funds and provisions of the Freedom of Information Act shall apply to financial records, unless otherwise specified within the Act. Each District shall safeguard, provide accountability, and expend funds only for approved purposes.

14. Electronic Copy:

An electronic copy of this policy guidance in PDF format is available on the Regulatory Town Hall under the Virginia Soil and Water Conservation Board at http://townhall.virginia.gov/L/GDocs.cfm.

15. Contact Information:

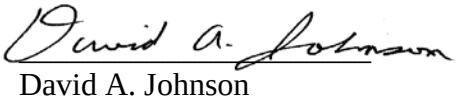
Please contact the Department of Conservation and Recreation's Policy Office at regcord@dcr.virginia.gov or by calling 804-786-6124 with any questions regarding the application of this Policy.

16. Authorization

Upon the approval of this Policy, the Department shall, in accordance with its fiduciary powers and responsibilities, make and enter into any and all Grant Agreements and contracts, and take all actions necessary, to fully implement and administer this Policy.

17. Adoption, Amendments, and Repeal:

This document will remain in effect until rescinded or superseded.



July 26, 2013

David A. Johnson
DCR Director

Date

Attachment A

Computer Model Estimates and Ranks Based on the 2010 305(b) Report Data of the Agricultural Pollutant Loads of Nitrogen (N), Phosphorus (P), and Sediment (S) in Each of the 1,247 6th-order Hydrologic Units (HU)

(kg/ha-yr – kilograms per hectare – year; mt/ha-yr – metric tons per hectare – year)

2010 Report Dataset	Unit Area Loads			Sorted Sequence (Rank Order) between HUs for each Pollutant's Load					
VAHU6	Ag N (kg/ha-yr)	Ag P (kg/ha-yr)	Ag S (mt/ha-yr)	NSEQ	PSEQ	SSEQ	Sum Order	Agricultural Pollutant Potential Rank	Row #
JL37	10.384	2.901	0.938	1196	1212	1200	3608	H	1
AS15	17.463	3.927	0.772	1214	1216	1175	3605	H	2
PS41	14.813	2.559	0.758	1212	1207	1171	3590	H	3
AS10	14.089	3.243	0.711	1211	1214	1162	3587	H	4
JL42	13.169	3.371	0.704	1210	1215	1158	3583	H	5
PS10	22.493	1.814	0.802	1217	1179	1180	3576	H	6
PS24	11.841	1.541	0.976	1204	1160	1203	3567	H	7
AS17	12.051	2.567	0.654	1207	1208	1141	3556	H	8
PS40	12.040	2.384	0.652	1206	1201	1140	3547	H	9
PS01	12.171	1.390	0.854	1208	1144	1186	3538	H	10
PS04	8.684	1.459	1.080	1173	1152	1211	3536	H	11
PS87	21.837	1.485	0.700	1215	1156	1157	3528	H	12
JL39	9.224	2.480	0.658	1177	1203	1146	3526	H	13
PS27	9.315	1.551	0.848	1180	1162	1184	3526	H	14
PS39	8.472	1.770	0.791	1172	1175	1178	3525	H	15
JL36	8.355	2.252	0.706	1164	1198	1160	3522	H	16
CU47	9.654	2.545	0.606	1186	1205	1129	3520	H	17
PS07	9.096	1.425	0.889	1176	1149	1195	3520	H	18
TP16	7.854	1.466	1.367	1151	1153	1215	3519	H	19
PS08	9.360	1.382	0.877	1181	1143	1193	3517	H	20
PS37	9.784	1.919	0.649	1190	1187	1139	3516	H	21
AS16	10.915	2.358	0.565	1199	1200	1104	3503	H	22
TH45	6.958	1.480	1.875	1125	1155	1217	3497	H	23
PS56	9.309	1.326	0.798	1179	1137	1179	3495	H	24
PS21	17.062	1.020	0.867	1213	1083	1192	3488	H	25
PS11	22.361	1.727	0.557	1216	1169	1100	3485	H	26
AO21	10.791	3.075	0.511	1198	1213	1067	3478	H	27
JL41	9.596	2.511	0.544	1185	1204	1089	3478	H	28
PS15	8.464	1.066	1.104	1170	1094	1212	3476	H	29

PS23	9.308	1.321	0.713	1178	1135	1163	3476	H	30
PU02	12.825	0.962	0.864	1209	1075	1190	3474	H	31
AS11	9.875	2.214	0.529	1192	1196	1080	3468	H	32
PL73	7.300	1.850	0.656	1141	1184	1143	3468	H	33
JL40	9.885	2.550	0.502	1193	1206	1064	3463	H	34
RA33	8.030	1.147	0.937	1155	1105	1199	3459	H	35
NE04	6.136	1.577	1.251	1078	1163	1213	3454	H	36
PS05	8.122	1.180	0.771	1159	1116	1174	3449	H	37
TH22	6.776	1.174	1.060	1115	1114	1209	3438	H	38
CB46	10.987	2.851	0.433	1200	1211	1024	3435	H	39
JL33	7.956	2.027	0.546	1153	1190	1091	3434	H	40
NE36	9.896	0.764	0.945	1194	1032	1201	3427	H	41
PS09	9.789	1.504	0.523	1191	1157	1075	3423	H	42
PU05	8.395	1.004	0.783	1165	1080	1176	3421	H	43
CB01	6.769	1.770	0.604	1114	1174	1127	3415	H	44
PS26	8.456	1.107	0.657	1168	1100	1145	3413	H	45
NE48	9.377	0.870	0.771	1182	1057	1173	3412	H	46
RA32	7.911	1.050	0.757	1152	1090	1169	3411	H	47
CM32	8.882	2.233	0.442	1175	1197	1030	3402	H	48
PS86	11.150	1.106	0.559	1202	1099	1101	3402	H	49
JU73	6.950	0.882	0.980	1124	1060	1204	3388	H	50
AS08	10.155	2.397	0.390	1195	1202	990	3387	H	51
TH19	6.437	1.158	0.844	1094	1109	1183	3386	H	52
PL09	9.532	0.829	0.667	1184	1047	1149	3380	H	53
NE56	9.781	0.741	0.738	1189	1023	1167	3379	H	54
TH43	8.762	0.708	0.863	1174	1013	1188	3375	H	55
PS35	9.424	1.739	0.422	1183	1171	1015	3369	H	56
TC29	11.443	0.651	0.826	1203	983	1182	3368	H	57
PS58	6.781	0.961	0.730	1117	1074	1165	3356	H	58
TP13	7.527	0.683	0.981	1143	999	1205	3347	H	59
NE10	6.647	0.745	1.271	1103	1026	1214	3343	H	60
NE76	29.094	0.692	0.581	1218	1005	1115	3338	H	61
JU78	7.072	0.993	0.595	1131	1079	1124	3334	H	62
AS07	11.870	2.673	0.328	1205	1209	915	3329	H	63
CU41	6.744	1.703	0.473	1109	1167	1050	3326	H	64
PS59	6.374	1.131	0.646	1089	1102	1135	3326	H	65
PS55	5.930	1.037	0.754	1068	1087	1168	3323	H	66
TP17	4.865	1.110	1.748	1004	1101	1216	3321	H	67
RA29	8.273	0.823	0.580	1161	1043	1114	3318	H	68
NE11	6.589	0.706	1.038	1099	1012	1206	3317	H	69
PS83	11.000	1.067	0.428	1201	1095	1021	3317	H	70
CM31	7.142	1.775	0.412	1133	1176	1006	3315	H	71
PS57	8.326	0.921	0.545	1162	1063	1090	3315	H	72

PS61	6.328	1.072	0.591	1086	1097	1121	3304	H	73
TP15	6.365	0.685	1.064	1088	1002	1210	3300	H	74
CU50	8.190	2.052	0.351	1160	1191	947	3298	H	75
JL46	6.767	1.716	0.422	1113	1168	1014	3295	H	76
CB03	6.143	1.642	0.476	1079	1164	1051	3294	H	77
PS06	5.634	1.015	0.669	1063	1081	1150	3294	H	78
TP14	6.747	0.633	1.054	1111	974	1208	3293	H	79
PS19	6.682	1.021	0.555	1105	1084	1098	3287	H	80
CB04	6.723	1.737	0.414	1108	1170	1008	3286	H	81
CU67	7.618	1.912	0.358	1145	1186	955	3286	H	82
CB45	8.088	2.105	0.341	1158	1193	930	3281	H	83
NE15	6.778	0.616	0.890	1116	964	1196	3276	H	84
NE82	4.851	0.923	0.960	1003	1065	1202	3270	H	85
PS42	8.462	1.472	0.348	1169	1154	941	3264	H	86
CB44	8.027	2.082	0.330	1154	1192	916	3262	H	87
PL69	4.509	1.420	0.647	978	1147	1136	3261	H	88
PS25	7.772	0.855	0.491	1150	1053	1058	3261	H	89
RA37	7.256	0.693	0.581	1139	1006	1116	3261	H	90
JL47	7.410	1.829	0.345	1142	1182	935	3259	H	91
PS62	6.404	1.220	0.450	1091	1122	1039	3252	H	92
JU74	6.114	0.714	0.705	1077	1015	1159	3251	H	93
NE07	6.305	0.611	1.048	1083	961	1207	3251	H	94
RA36	8.071	0.771	0.494	1157	1034	1059	3250	H	95
PL07	8.438	0.659	0.551	1167	988	1094	3249	H	96
PL72	5.374	1.407	0.498	1038	1145	1061	3244	H	97
TC01	6.451	0.581	0.937	1095	944	1198	3237	H	98
TC06	8.469	0.511	0.850	1171	881	1185	3237	H	99
RA26	7.677	0.873	0.446	1147	1058	1031	3236	H	100
AS19	4.818	1.165	0.602	999	1110	1126	3235	H	101
TP10	6.879	0.555	0.855	1121	925	1187	3233	H	102
AS09	9.737	2.188	0.286	1188	1194	850	3232	H	103
JU86	5.083	0.869	0.677	1018	1056	1151	3225	H	104
AO08	7.024	1.778	0.331	1128	1177	918	3223	H	105
AO10	8.342	2.211	0.293	1163	1195	861	3219	H	106
CU49	7.230	1.870	0.315	1136	1185	897	3218	H	107
JU76	5.546	0.675	0.685	1056	996	1154	3206	H	108
RA30	7.256	0.659	0.529	1138	987	1079	3204	H	109
CU59	6.096	1.545	0.366	1076	1161	964	3201	H	110
NE37	6.635	0.532	0.865	1102	903	1191	3196	H	111
AO09	6.555	1.763	0.335	1097	1173	921	3191	H	112
TH20	6.847	0.579	0.617	1119	941	1131	3191	H	113
PS33	5.980	0.916	0.473	1071	1062	1049	3182	H	114
TH18	6.932	0.571	0.592	1123	937	1122	3182	H	115

JU59	4.428	0.801	0.758	969	1039	1170	3178	H	116
TH23	4.200	1.181	0.570	951	1117	1108	3176	H	117
CU65	7.038	1.845	0.295	1129	1183	863	3175	H	118
CU55	5.333	1.270	0.407	1034	1129	1003	3166	H	119
AS20	4.875	1.028	0.522	1006	1085	1074	3165	H	120
PL71	5.161	1.409	0.388	1023	1146	987	3156	H	121
PL70	6.963	1.925	0.281	1126	1188	839	3153	H	122
PS20	6.747	0.990	0.368	1110	1077	966	3153	H	123
TC25	4.573	0.669	0.787	981	994	1177	3152	H	124
RA20	7.614	0.758	0.380	1144	1029	976	3149	H	125
YA03	4.481	0.668	0.805	975	992	1181	3148	H	126
RD01	5.510	0.647	0.578	1052	980	1111	3143	H	127
PS84	6.844	0.830	0.374	1118	1048	973	3139	H	128
NE49	6.691	0.593	0.529	1106	954	1078	3138	H	129
TH13	9.700	0.488	0.541	1187	862	1088	3137	H	130
TH44	4.189	0.672	0.864	950	995	1189	3134	H	131
CU43	5.392	1.422	0.350	1040	1148	945	3133	H	132
NE08	4.617	0.590	0.887	986	950	1194	3130	H	133
CB05	5.126	1.289	0.382	1019	1131	979	3129	H	134
RL24	4.188	0.848	0.605	949	1051	1128	3128	H	135
RU22	4.913	0.700	0.570	1008	1009	1107	3124	H	136
RA15	4.685	0.652	0.657	989	984	1144	3117	H	137
TC27	4.718	0.643	0.659	990	978	1147	3115	H	138
TH14	7.175	0.540	0.514	1135	909	1070	3114	H	139
CB43	6.595	1.789	0.278	1100	1178	831	3109	H	140
NE58	5.136	0.563	0.696	1020	932	1156	3108	H	141
PS28	7.076	1.226	0.284	1132	1123	845	3100	H	142
TC30	4.395	0.613	0.761	966	962	1172	3100	H	143
TH15	6.764	0.550	0.512	1112	919	1068	3099	H	144
AS14	6.315	1.281	0.306	1085	1130	883	3098	H	145
CM28	5.145	1.149	0.368	1021	1106	968	3095	H	146
JL13	4.743	1.265	0.376	993	1127	975	3095	H	147
RA54	4.635	1.310	0.374	987	1133	974	3094	H	148
JU80	5.400	0.655	0.502	1041	986	1063	3090	H	149
CU57	5.278	1.231	0.346	1026	1124	937	3087	H	150
RA74	4.915	1.320	0.348	1009	1134	940	3083	H	151
TH24	7.684	0.493	0.509	1149	867	1066	3082	H	152
YO09	5.567	0.800	0.387	1057	1038	985	3080	H	153
RU53	6.888	0.495	0.538	1122	870	1086	3078	H	154
TC08	5.973	0.508	0.612	1070	878	1130	3078	H	155
TH07	6.464	0.510	0.560	1096	880	1102	3078	H	156
PS67	6.066	0.695	0.400	1074	1007	996	3077	H	157
JL49	4.280	0.931	0.457	958	1067	1043	3068	H	158

AO20	8.404	2.263	0.223	1166	1199	699	3064	H	159
TP12	5.043	0.522	0.692	1015	893	1155	3063	H	160
PS85	8.039	0.731	0.309	1156	1020	885	3061	H	161
NE54	4.598	0.680	0.516	985	998	1071	3054	H	162
TH41	4.080	0.590	0.709	939	949	1161	3049	H	163
AS13	5.575	1.168	0.299	1058	1112	872	3042	H	164
RA40	6.851	0.599	0.362	1120	957	958	3035	H	165
CU68	6.165	1.522	0.262	1080	1158	793	3031	H	166
NE13	6.187	0.433	0.630	1082	814	1132	3028	H	167
TC13	5.529	0.435	0.662	1054	817	1148	3019	H	168
CL01	5.576	1.324	0.274	1059	1136	818	3013	H	169
CU60	4.837	1.192	0.312	1002	1119	892	3013	H	170
TC11	5.292	0.466	0.648	1028	846	1137	3011	H	171
CB14	4.223	1.036	0.369	953	1086	971	3010	H	172
RU20	4.237	0.629	0.531	954	971	1083	3008	H	173
CB38	6.629	1.818	0.231	1101	1180	723	3004	H	174
CU64	5.467	1.429	0.268	1048	1150	804	3002	H	175
CB42	6.417	1.759	0.237	1093	1172	736	3001	H	176
TC16	5.318	0.460	0.593	1032	843	1123	2998	H	177
JM02	4.920	0.626	0.423	1010	970	1017	2997	H	178
JM24	6.187	0.498	0.455	1081	872	1041	2994	H	179
PL68	5.011	1.306	0.286	1013	1132	849	2994	H	180
RA55	4.306	1.184	0.327	959	1118	914	2991	H	181
RA62	4.736	1.341	0.289	992	1140	854	2986	H	182
TP06	3.996	0.530	0.679	933	900	1153	2986	H	183
RU24	4.445	0.621	0.465	971	966	1046	2983	H	184
RA34	5.829	0.617	0.354	1067	965	950	2982	H	185
NE51	3.775	0.598	0.578	913	956	1110	2979	H	186
RA04	4.792	0.601	0.429	998	958	1023	2979	H	187
NE35	4.004	0.550	0.591	935	918	1120	2973	H	188
CB11	4.217	1.093	0.336	952	1098	922	2972	H	189
JL32	3.901	1.019	0.368	922	1082	967	2971	H	190
TP18	4.110	0.515	0.655	941	888	1142	2971	H	191
PL08	7.663	0.543	0.326	1146	911	913	2970	H	192
JU72	3.254	0.633	0.737	830	972	1166	2968	H	193
NE52	3.971	0.562	0.569	931	931	1105	2967	H	194
NE65	5.605	0.406	0.646	1061	771	1133	2965	H	195
AO14	7.158	1.819	0.203	1134	1181	648	2963	H	196
RA53	3.368	0.958	0.442	859	1072	1029	2960	H	197
TC09	5.470	0.415	0.596	1049	786	1125	2960	H	198
PS16	5.959	0.722	0.298	1069	1016	869	2954	H	199
RU57	4.267	0.551	0.527	956	921	1077	2954	H	200
CU38	4.401	0.667	0.398	967	991	994	2952	H	201

PS60	3.166	0.826	0.540	816	1045	1087	2948	H	202
RA19	6.580	0.580	0.321	1098	943	907	2948	H	203
CB37	10.669	2.741	0.172	1197	1210	540	2947	H	204
RA72	4.171	1.054	0.324	946	1091	910	2947	H	205
PS69	3.598	0.698	0.471	887	1008	1048	2943	H	206
RA24	4.501	0.633	0.389	977	973	989	2939	H	207
TC12	5.531	0.410	0.572	1055	775	1109	2939	H	208
JL51	6.711	1.434	0.211	1107	1151	670	2928	H	209
PS63	4.453	0.614	0.389	972	963	988	2923	H	210
TH12	6.309	0.410	0.486	1084	776	1054	2914	H	211
NE53	3.740	0.548	0.535	912	915	1084	2911	H	212
PL31	7.286	0.500	0.315	1140	873	896	2909	H	213
NE33	4.577	0.449	0.553	982	831	1095	2908	H	214
RU68	4.433	0.534	0.447	970	904	1033	2907	H	215
RA69	3.998	1.064	0.303	934	1093	877	2904	H	216
PL10	6.065	0.570	0.313	1073	936	893	2902	H	217
CM30	4.923	1.175	0.250	1011	1115	773	2899	H	218
RA56	4.154	1.172	0.281	945	1113	838	2896	H	219
NE16	3.422	0.493	0.719	863	866	1164	2893	H	220
JL30	3.359	0.955	0.367	856	1071	965	2892	H	221
AO13	5.578	1.539	0.211	1060	1159	671	2890	H	222
CB39	6.394	1.698	0.199	1090	1166	633	2889	H	223
JU84	3.350	0.557	0.570	852	927	1106	2885	H	224
CB41	6.350	1.684	0.199	1087	1165	632	2884	H	225
PL13	7.249	0.524	0.289	1137	894	853	2884	H	226
CU48	4.873	1.246	0.244	1005	1125	753	2883	H	227
CM26	3.368	0.991	0.350	858	1078	944	2880	H	228
PS68	4.568	0.649	0.332	980	981	919	2880	H	229
RA38	5.520	0.634	0.286	1053	976	848	2877	H	230
RU23	3.925	0.545	0.449	925	914	1038	2877	H	231
RU33	4.043	0.551	0.425	937	920	1020	2877	H	232
TC28	5.473	0.393	0.526	1051	747	1076	2874	H	233
NE14	3.539	0.478	0.649	879	855	1138	2872	H	234
TP05	3.479	0.517	0.579	870	890	1112	2872	H	235
JU75	3.540	0.568	0.486	880	935	1055	2870	H	236
RA16	5.332	0.532	0.345	1033	902	933	2868	H	237
NE50	3.686	0.539	0.489	902	908	1057	2867	H	238
YA04	3.833	0.474	0.556	917	851	1099	2867	H	239
RA73	3.481	0.938	0.338	872	1068	925	2865	H	240
PS03	3.647	0.677	0.359	896	997	956	2849	M	241
NE84	2.714	0.555	0.900	722	924	1197	2843	M	242
JU42	6.079	0.372	0.502	1075	703	1062	2840	M	243
RU21	3.534	0.568	0.440	878	934	1028	2840	M	244

RU46	3.601	0.496	0.530	888	871	1081	2840	M	245
RU48	3.549	0.506	0.531	882	876	1082	2840	M	246
JU85	3.272	0.535	0.553	835	906	1096	2837	M	247
RA27	4.365	0.578	0.344	965	940	932	2837	M	248
NE17	4.364	0.427	0.520	964	798	1073	2835	M	249
NE12	3.320	0.476	0.646	847	853	1134	2834	M	250
NE40	3.941	0.514	0.429	927	885	1022	2834	M	251
NE55	3.941	0.506	0.439	928	877	1027	2832	M	252
RA58	4.046	1.062	0.265	938	1092	799	2829	M	253
PU18	6.660	0.727	0.224	1104	1019	704	2827	M	254
TH16	5.471	0.401	0.423	1050	761	1016	2827	M	255
PU19	6.964	0.752	0.209	1127	1028	666	2821	M	256
CB15	5.642	1.377	0.194	1064	1142	608	2814	M	257
JL15	2.804	0.849	0.421	748	1052	1013	2813	M	258
NE32	5.403	0.410	0.391	1042	774	991	2807	M	259
RD02	3.641	0.489	0.471	894	864	1047	2805	M	260
TH33	5.791	0.368	0.457	1066	697	1042	2805	M	261
CM25	3.912	0.591	0.340	924	951	929	2804	M	262
PL67	3.507	0.948	0.292	875	1070	858	2803	M	263
CU63	4.782	1.217	0.213	997	1121	681	2799	M	264
TH26	3.359	0.446	0.580	857	828	1113	2798	M	265
PS70	3.489	0.634	0.352	873	975	949	2797	M	266
PS82	4.479	0.624	0.290	974	968	855	2797	M	267
PL03	5.740	0.422	0.347	1065	793	938	2796	M	268
TP11	3.218	0.435	0.678	825	816	1152	2793	M	269
CB02	3.679	0.858	0.281	900	1054	837	2791	M	270
PS02	3.507	0.644	0.345	876	979	934	2789	M	271
TH42	5.283	0.362	0.509	1027	690	1065	2782	M	272
NE20	3.737	0.453	0.449	911	833	1037	2781	M	273
RU52	3.722	0.458	0.447	908	841	1032	2781	M	274
NE86	3.684	0.399	0.589	901	758	1119	2778	M	275
JM46	3.956	0.460	0.410	929	842	1005	2776	M	276
RA28	3.700	0.494	0.406	905	869	1002	2776	M	277
CU66	5.438	1.340	0.189	1046	1139	590	2775	M	278
RU30	4.178	0.541	0.331	948	910	917	2775	M	279
YO16	4.352	0.549	0.312	962	917	891	2770	M	280
RA66	4.172	1.141	0.230	947	1104	718	2769	M	281
RA35	3.736	0.504	0.382	910	875	978	2763	M	282
PL11	7.047	0.482	0.250	1130	857	772	2759	M	283
RU42	5.388	0.381	0.399	1039	723	995	2757	M	284
TC07	5.358	0.319	0.584	1037	603	1117	2757	M	285
NE28	5.613	0.429	0.311	1062	805	888	2755	M	286
NE79	3.429	0.423	0.548	865	795	1093	2753	M	287

TH08	3.876	0.453	0.393	920	834	993	2747	M	288
CB31	5.420	1.373	0.178	1043	1141	561	2745	M	289
RD07	4.277	0.471	0.348	957	848	939	2744	M	290
CB36	4.499	1.257	0.201	976	1126	641	2743	M	291
RA59	3.165	0.829	0.306	815	1046	882	2743	M	292
JR07	3.662	0.442	0.424	898	824	1018	2740	M	293
JM16	4.330	0.526	0.304	961	896	879	2736	M	294
RA68	3.274	0.876	0.282	836	1059	841	2736	M	295
TH02	4.538	0.406	0.385	979	770	983	2732	M	296
CU69	5.014	1.213	0.190	1014	1120	595	2729	M	297
RL03	3.503	0.489	0.386	874	863	984	2721	M	298
CU42	3.971	0.960	0.230	930	1073	717	2720	M	299
JL11	3.287	0.906	0.269	841	1061	809	2711	M	300
PS64	4.143	0.549	0.286	944	916	847	2707	M	301
JU55	3.300	0.442	0.455	844	822	1040	2706	M	302
RU11	3.304	0.418	0.518	845	789	1072	2706	M	303
TH27	3.130	0.428	0.555	808	801	1097	2706	M	304
CU18	3.103	0.738	0.299	806	1022	871	2699	M	305
RA06	4.093	0.484	0.317	940	859	900	2699	M	306
RU35	3.928	0.512	0.312	926	883	890	2699	M	307
RA63	3.805	0.977	0.225	915	1076	707	2698	M	308
RA07	5.993	0.397	0.299	1072	753	870	2695	M	309
CB27	4.875	1.339	0.172	1007	1138	539	2684	M	310
TH17	3.082	0.454	0.464	802	836	1045	2683	M	311
CB28	7.681	2.000	0.121	1148	1189	345	2682	M	312
CU61	4.819	1.157	0.180	1000	1108	570	2678	M	313
JL14	3.261	0.840	0.255	833	1050	781	2664	M	314
PS75	5.430	0.534	0.226	1045	905	708	2658	M	315
RD41	2.935	0.487	0.435	771	861	1025	2657	M	316
RA18	6.413	0.527	0.206	1092	897	657	2646	M	317
TC33	2.191	0.759	0.448	577	1030	1036	2643	M	318
TH21	4.831	0.332	0.408	1001	637	1004	2642	M	319
YO17	3.632	0.465	0.314	893	844	895	2632	M	320
JA04	3.911	0.480	0.289	923	856	852	2631	M	321
RD19	2.693	0.475	0.481	716	852	1052	2620	M	322
CB30	4.314	1.168	0.174	960	1111	544	2615	M	323
PS43	3.731	0.669	0.228	909	993	713	2615	M	324
JA26	3.458	0.532	0.284	869	901	844	2614	M	325
RD53	3.308	0.429	0.364	846	804	960	2610	M	326
CM21	4.770	1.043	0.168	996	1088	523	2607	M	327
RU41	3.693	0.413	0.335	903	781	920	2604	M	328
PL04	5.344	0.395	0.274	1035	751	816	2602	M	329
TH03	3.428	0.417	0.355	864	787	951	2602	M	330

RA01	3.226	0.398	0.413	826	754	1007	2587	M	331
CB32	4.997	1.267	0.148	1012	1128	445	2585	M	332
RU47	3.172	0.419	0.382	818	790	977	2585	M	333
PL12	4.115	0.391	0.317	942	743	899	2584	M	334
JM26	3.285	0.415	0.361	840	785	957	2582	M	335
RU54	4.251	0.393	0.306	955	746	881	2582	M	336
TP09	2.601	0.399	0.587	701	756	1118	2575	M	337
PL02	4.582	0.431	0.252	984	810	777	2571	M	338
PL15	4.753	0.377	0.294	995	714	862	2571	M	339
JL25	2.890	0.748	0.255	763	1027	780	2570	M	340
PU16	5.063	0.640	0.181	1016	977	574	2567	M	341
RD56	3.709	0.442	0.281	906	825	836	2567	M	342
NE09	2.756	0.390	0.547	734	740	1092	2566	M	343
RU93	3.268	0.448	0.316	834	830	898	2562	M	344
NE39	3.040	0.375	0.484	795	712	1053	2560	M	345
PL05	5.420	0.403	0.243	1044	766	750	2560	M	346
CU39	3.548	0.795	0.201	881	1037	640	2558	M	347
YO10	3.567	0.474	0.274	885	850	817	2552	M	348
RL01	3.028	0.432	0.351	792	812	946	2550	M	349
NE06	2.831	0.383	0.513	756	724	1069	2549	M	350
RL02	2.714	0.443	0.403	723	826	1000	2549	M	351
CM20	3.481	0.727	0.206	871	1018	658	2547	M	352
PS81	4.409	0.476	0.231	968	854	722	2544	M	353
CU51	4.746	1.151	0.147	994	1107	441	2542	M	354
RA57	2.950	0.761	0.235	778	1031	731	2540	M	355
RU29	3.342	0.428	0.310	851	802	886	2539	M	356
RU62	3.693	0.436	0.273	904	818	815	2537	M	357
RA10	3.331	0.398	0.340	850	755	928	2533	M	358
JL10	3.062	0.813	0.219	797	1042	691	2530	M	359
RD55	3.430	0.413	0.309	866	780	884	2530	M	360
RD71	2.554	0.430	0.448	689	806	1035	2530	M	361
TC02	3.612	0.310	0.489	889	585	1056	2530	M	362
RD04	2.761	0.414	0.415	736	782	1009	2527	M	363
TH39	2.581	0.392	0.538	693	744	1085	2522	M	364
JM23	2.917	0.407	0.383	767	772	980	2519	M	365
CM29	4.579	1.134	0.143	983	1103	432	2518	M	366
RU25	2.964	0.423	0.350	780	794	943	2517	M	367
YO63	2.792	0.792	0.237	744	1036	735	2515	M	368
RU32	3.623	0.454	0.259	891	837	786	2514	M	369
AO04	2.800	0.946	0.221	747	1069	694	2510	M	370
JR02	3.394	0.391	0.321	861	742	906	2509	M	371
JU01	3.290	0.430	0.292	842	807	857	2506	M	372
JL08	2.755	0.738	0.243	733	1021	751	2505	M	373

RD68	3.410	0.403	0.304	862	765	878	2505	M	374
RD11	3.158	0.361	0.402	813	689	997	2499	M	375
JL09	3.039	0.806	0.206	794	1041	659	2494	M	376
RU92	3.585	0.442	0.259	886	823	785	2494	M	377
NE64	5.317	0.277	0.365	1031	499	961	2491	M	378
NE19	2.807	0.367	0.463	750	696	1044	2490	M	379
CU11	3.282	0.483	0.261	838	858	792	2488	M	380
JL35	2.515	0.689	0.269	676	1004	808	2488	M	381
RD03	2.882	0.391	0.385	762	741	982	2485	M	382
NE30	3.846	0.373	0.293	918	706	860	2484	M	383
PS44	3.012	0.592	0.237	788	952	734	2474	M	384
CM27	3.806	0.773	0.168	916	1035	522	2473	M	385
TC22	2.711	0.390	0.419	720	739	1011	2470	M	386
TH40	2.529	0.385	0.495	681	728	1060	2469	M	387
PS79	5.312	0.563	0.164	1030	933	500	2463	M	388
CM03	3.560	0.457	0.238	884	839	738	2461	M	389
CU62	4.355	1.048	0.137	963	1089	409	2461	M	390
PL06	3.169	0.387	0.323	817	735	909	2461	M	391
JL07	2.774	0.766	0.217	738	1033	687	2458	M	392
NE66	5.182	0.323	0.276	1024	611	823	2458	M	393
RD08	3.229	0.373	0.340	827	704	927	2458	M	394
RD59	3.350	0.402	0.277	853	764	826	2443	M	395
CB16	3.987	0.924	0.148	932	1066	444	2442	M	396
RU67	3.251	0.371	0.326	829	701	912	2442	M	397
RU59	2.890	0.385	0.349	764	729	942	2435	M	398
JM62	2.372	0.428	0.391	636	800	992	2428	M	399
JL06	2.517	0.702	0.239	678	1010	739	2427	M	400
RD46	3.353	0.399	0.271	855	757	811	2423	M	401
RU77	3.352	0.414	0.258	854	784	784	2422	M	402
JM27	2.851	0.371	0.365	758	699	962	2419	M	403
RD54	3.205	0.395	0.285	822	750	846	2418	M	404
JR06	3.177	0.365	0.318	819	695	901	2415	M	405
NE61	4.725	0.357	0.241	991	679	745	2415	M	406
PS30	3.804	0.560	0.179	914	929	564	2407	M	407
CU70	3.884	0.922	0.140	921	1064	421	2406	M	408
JU71	2.372	0.441	0.352	637	821	948	2406	M	409
RA71	2.526	0.573	0.260	679	939	788	2406	M	410
AS12	3.855	0.839	0.144	919	1049	436	2404	M	411
RD70	2.975	0.414	0.278	782	783	830	2395	M	412
YO02	3.511	0.445	0.218	877	827	690	2394	M	413
CB19	4.465	1.069	0.112	973	1096	321	2390	M	414
RD75	3.236	0.402	0.265	828	763	798	2389	M	415
JU53	3.076	0.365	0.312	801	694	889	2384	M	416

RU71	3.026	0.358	0.326	791	681	911	2383	M	417
RA21	4.019	0.514	0.177	936	886	555	2377	M	418
TH29	2.683	0.334	0.425	714	640	1019	2373	M	419
TP19	1.836	0.420	0.562	474	791	1103	2368	M	420
RU01	2.265	0.406	0.403	599	769	999	2367	M	421
JA01	3.710	0.447	0.198	907	829	628	2364	M	422
JU83	2.396	0.466	0.300	642	845	874	2361	M	423
TH10	2.682	0.331	0.421	713	635	1012	2360	M	424
RA13	5.216	0.241	0.338	1025	411	923	2359	M	425
RA39	4.126	0.453	0.184	943	835	581	2359	M	426
YO61	2.305	0.686	0.240	612	1003	740	2355	M	427
CU33	2.812	0.666	0.195	751	990	612	2353	M	428
NE22	2.938	0.354	0.320	773	674	905	2352	M	429
NE31	5.072	0.338	0.215	1017	650	683	2350	M	430
TH38	2.539	0.348	0.403	686	665	998	2349	M	431
YO31	3.138	0.725	0.168	811	1017	521	2349	M	432
PL66	2.358	0.605	0.245	631	960	757	2348	M	433
JR10	3.667	0.427	0.202	899	797	643	2339	M	434
RU31	3.283	0.396	0.241	839	752	747	2338	M	435
RD43	2.878	0.375	0.296	761	710	865	2336	M	436
RU60	3.323	0.374	0.254	848	709	779	2336	M	437
RD57	3.109	0.386	0.265	807	731	797	2335	M	438
CU58	2.620	0.651	0.203	704	982	647	2333	M	439
PL37	5.299	0.380	0.184	1029	721	580	2330	M	440
JM49	2.822	0.356	0.314	753	677	894	2324	M	441
NE38	2.746	0.350	0.340	729	668	926	2323	M	442
CU46	3.632	0.863	0.130	892	1055	375	2322	M	443
JM29	2.775	0.321	0.372	739	607	972	2318	M	444
NE46	3.551	0.373	0.235	883	705	730	2318	M	445
CU54	2.936	0.712	0.170	772	1014	529	2315	M	446
NE26	3.438	0.386	0.229	867	732	716	2315	M	447
JR13	2.644	0.331	0.369	707	634	970	2311	M	448
PL35	3.457	0.322	0.279	868	609	833	2310	M	449
RU76	3.206	0.379	0.249	823	717	767	2307	M	450
PL36	5.149	0.356	0.194	1022	678	606	2306	M	451
RD49	3.017	0.371	0.273	790	700	814	2304	M	452
RA61	2.933	0.743	0.166	770	1024	507	2301	M	453
JR05	3.153	0.380	0.249	812	720	768	2300	M	454
TC26	2.181	0.364	0.448	573	692	1034	2299	M	455
NE60	2.892	0.351	0.296	765	669	864	2298	M	456
TC18	2.509	0.346	0.364	674	662	959	2295	M	457
PU03	2.975	0.394	0.248	781	749	764	2294	M	458
RU36	3.009	0.384	0.253	787	727	778	2292	M	459

PS31	3.616	0.624	0.143	890	967	430	2287	M	460
JM44	3.646	0.400	0.199	895	759	631	2285	M	461
NE25	3.650	0.335	0.241	897	643	744	2284	M	462
CU52	2.615	0.653	0.190	702	985	594	2281	M	463
PL42	4.657	0.451	0.153	988	832	460	2280	M	464
RU51	3.063	0.341	0.278	798	652	829	2279	M	465
RU65	3.330	0.371	0.232	849	702	725	2276	M	466
CL04	2.297	0.521	0.249	610	892	769	2271	M	467
RA67	2.705	0.685	0.174	719	1000	543	2262	M	468
JR01	3.203	0.347	0.252	821	664	776	2261	M	469
NE63	2.351	0.316	0.439	628	600	1026	2254	M	470
AS18	2.251	0.469	0.269	596	847	807	2250	M	471
RA17	5.442	0.434	0.133	1047	815	387	2249	M	472
JM18	3.138	0.381	0.227	810	722	711	2243	M	473
CU36	3.072	0.744	0.139	800	1025	415	2240	M	474
RA65	2.661	0.702	0.168	709	1011	520	2240	M	475
CM24	3.065	0.440	0.196	799	820	617	2236	M	476
PS78	2.928	0.432	0.204	768	811	650	2229	M	477
RD34	3.013	0.339	0.256	789	651	783	2223	M	478
YO01	3.368	0.393	0.196	860	745	616	2221	M	479
CU35	2.452	0.580	0.196	659	942	618	2219	M	480
JM82	2.773	0.401	0.231	737	760	721	2218	M	481
RD37	2.751	0.348	0.275	730	666	821	2217	M	482
YO12	3.038	0.375	0.227	793	711	710	2214	M	483
JA27	3.048	0.422	0.197	796	792	624	2212	M	484
PS22	2.149	0.455	0.271	562	838	812	2212	M	485
RD50	3.276	0.374	0.209	837	708	665	2210	M	486
RA25	3.197	0.418	0.191	820	788	598	2206	M	487
CU25	2.514	0.588	0.186	675	946	584	2205	M	488
RA41	3.091	0.388	0.207	804	736	662	2202	M	489
RD77	2.717	0.353	0.269	724	672	806	2202	M	490
NE03	2.320	0.302	0.417	620	567	1010	2197	M	491
RU50	3.291	0.354	0.212	843	676	677	2196	M	492
RD48	2.942	0.346	0.245	775	663	756	2194	M	493
YO11	2.945	0.384	0.218	777	726	689	2192	M	494
CU56	2.904	0.685	0.140	766	1001	420	2187	M	495
RU74	2.877	0.329	0.261	760	628	790	2178	M	496
YO66	2.315	0.603	0.191	617	959	600	2176	M	497
JU58	2.287	0.316	0.366	606	599	963	2168	M	498
RU03	2.073	0.353	0.358	539	671	954	2164	M	499
YO15	2.992	0.380	0.207	784	719	661	2164	M	500
RU49	3.217	0.341	0.216	824	653	684	2161	M	501
CB35	2.954	0.825	0.119	779	1044	337	2160	M	502

PL01	2.943	0.328	0.245	776	627	755	2158	M	503
NE47	2.759	0.325	0.266	735	616	801	2152	M	504
RA08	2.713	0.315	0.280	721	594	835	2150	M	505
RD44	2.994	0.353	0.216	785	673	685	2143	M	506
YO37	2.117	0.585	0.203	551	945	646	2142	M	507
NE21	2.567	0.345	0.261	690	660	791	2141	M	508
JM30	2.242	0.302	0.384	593	566	981	2140	M	509
PS36	3.259	0.554	0.131	832	923	381	2136	M	510
JR11	2.587	0.315	0.284	697	593	843	2133	M	511
CB17	2.732	0.625	0.143	727	969	431	2127	M	512
TH31	2.476	0.300	0.319	665	556	903	2124	M	513
RU91	3.135	0.354	0.201	809	675	639	2123	M	514
YO45	2.312	0.458	0.208	615	840	663	2118	M	515
YO54	2.283	0.561	0.185	605	930	583	2118	M	516
YO03	2.726	0.364	0.213	726	693	680	2099	M	517
RL07	2.785	0.338	0.225	742	649	706	2097	M	518
RA60	2.229	0.593	0.177	586	953	557	2096	M	519
RU66	2.583	0.301	0.283	694	560	842	2096	M	520
YO18	2.408	0.315	0.292	643	592	856	2091	M	521
RA64	2.705	0.665	0.131	718	989	382	2089	M	522
RU40	2.616	0.309	0.268	703	583	803	2089	M	523
JM22	3.091	0.377	0.180	803	713	568	2084	M	524
JM13	2.132	0.316	0.338	557	598	924	2079	M	525
RU56	2.542	0.303	0.275	687	570	819	2076	M	526
RD63	2.985	0.330	0.205	783	633	655	2071	M	527
JM39	2.292	0.335	0.275	608	642	820	2070	M	528
RA14	2.668	0.289	0.278	711	526	827	2064	M	529
TC31	2.357	0.291	0.319	630	532	902	2064	M	530
RD58	2.848	0.333	0.210	757	639	667	2063	M	531
YO29	2.123	0.539	0.191	554	907	599	2060	M	532
AO01	2.533	0.806	0.117	683	1040	334	2057	M	533
RD69	2.361	0.337	0.252	632	646	775	2053	M	534
RU78	2.804	0.321	0.222	749	608	695	2052	M	535
CU24	2.163	0.553	0.178	569	922	560	2051	M	536
RD74	2.371	0.326	0.264	635	620	795	2050	M	537
RU70	3.098	0.329	0.196	805	629	615	2049	M	538
RD45	2.659	0.317	0.237	708	602	733	2043	M	539
NE67	2.470	0.313	0.261	663	589	789	2041	M	540
CU28	2.412	0.544	0.157	647	913	479	2039	M	541
CB13	2.171	0.528	0.180	571	898	569	2038	M	542
JR17	2.739	0.316	0.227	728	601	709	2038	M	543
YO60	2.149	0.594	0.168	563	955	519	2037	M	544
RU18	2.239	0.302	0.305	591	565	880	2036	M	545

PS74	2.931	0.384	0.172	769	725	538	2032	M	546
JM12	2.596	0.328	0.223	699	626	698	2023	M	547
JR08	2.411	0.296	0.280	645	544	834	2023	M	548
NE23	2.453	0.306	0.256	660	577	782	2019	M	549
JA33	2.940	0.410	0.155	774	773	467	2014	M	550
JU60	2.187	0.360	0.241	575	684	746	2005	M	551
RL19	2.426	0.345	0.220	652	659	692	2003	M	552
RA05	2.486	0.285	0.273	668	521	813	2002	M	553
YO58	2.067	0.544	0.177	534	912	556	2002	M	554
NE24	2.412	0.308	0.250	648	580	771	1999	M	555
JM47	2.528	0.330	0.213	680	631	679	1990	M	556
CB06	2.337	0.589	0.139	626	947	414	1987	M	557
TH36	1.692	0.303	0.388	427	569	986	1982	M	558
JA15	2.776	0.348	0.181	740	667	573	1980	M	559
PU06	1.744	0.360	0.288	446	683	851	1980	M	560
YO14	2.814	0.344	0.180	752	657	567	1976	M	561
CU53	2.354	0.573	0.137	629	938	408	1975	M	562
RU79	2.489	0.297	0.246	669	547	759	1975	M	563
JA02	2.539	0.342	0.200	685	654	635	1974	M	564
RL06	1.839	0.314	0.319	475	590	904	1969	M	565
RU58	2.585	0.296	0.232	696	546	724	1966	M	566
RD73	2.269	0.325	0.241	601	614	743	1958	M	567
JU54	2.222	0.270	0.311	584	486	887	1957	M	568
YO25	2.571	0.324	0.204	692	612	649	1953	M	569
NE01	1.722	0.302	0.358	436	563	953	1952	M	570
AO02	1.620	0.590	0.192	402	948	601	1951	M	571
JL12	2.185	0.559	0.149	574	928	449	1951	M	572
JM48	2.752	0.306	0.202	731	578	642	1951	M	573
RU17	2.503	0.285	0.245	672	522	754	1948	M	574
PS48	1.958	0.281	0.344	509	507	931	1947	M	575
RD72	2.597	0.330	0.195	700	632	611	1943	M	576
RL10	2.479	0.325	0.207	667	615	660	1942	M	577
NE57	2.670	0.281	0.231	712	509	720	1941	M	578
AS02	2.218	0.429	0.175	582	803	550	1935	M	579
CB10	2.128	0.521	0.159	555	891	482	1928	M	580
JM61	2.309	0.361	0.197	614	688	623	1925	M	581
RD52	2.665	0.301	0.205	710	561	654	1925	M	582
RU94	1.828	0.310	0.298	473	584	868	1925	M	583
YO55	2.143	0.526	0.155	559	895	468	1922	M	584
JR18	2.830	0.304	0.190	755	574	592	1921	M	585
YA07	2.235	0.302	0.248	590	564	763	1917	M	586
RU39	2.791	0.298	0.197	743	551	622	1916	M	587
YO57	2.042	0.512	0.166	528	882	506	1916	M	588

RU43	2.685	0.286	0.212	715	524	676	1915	M	589
JA24	2.829	0.380	0.147	754	718	440	1912	M	590
PL33	3.254	0.327	0.151	831	625	454	1910	M	591
RU83	2.856	0.326	0.170	759	622	527	1908	M	592
RD65	2.469	0.285	0.229	662	519	714	1895	M	593
PL14	2.534	0.295	0.209	684	541	664	1889	M	594
NE71	1.892	0.252	0.357	491	434	952	1877	M	595
JA20	1.918	0.353	0.224	500	670	703	1873	M	596
RU87	2.996	0.326	0.154	786	623	464	1873	M	597
RL12	2.201	0.296	0.242	581	543	748	1872	M	598
RU69	2.589	0.297	0.198	698	548	626	1872	M	599
JM79	2.507	0.338	0.175	673	648	549	1870	M	600
PL39	3.164	0.359	0.130	814	682	374	1870	M	601
RU04	2.151	0.266	0.279	565	473	832	1870	M	602
JU52	1.945	0.276	0.297	506	496	866	1868	M	603
RU64	2.795	0.299	0.180	746	555	566	1867	M	604
JM08	2.336	0.268	0.246	624	482	758	1864	M	605
RD15	2.083	0.277	0.277	541	498	825	1864	M	606
TC34	1.652	0.269	0.369	410	483	969	1862	M	607
RL05	1.654	0.306	0.300	412	576	873	1861	M	608
JU25	1.871	0.337	0.233	485	645	728	1858	M	609
RA48	2.069	0.378	0.194	535	716	607	1858	M	610
CU21	1.763	0.326	0.260	451	618	787	1856	M	611
RU02	1.912	0.290	0.278	499	528	828	1855	M	612
TH06	2.064	0.279	0.276	532	500	822	1854	M	613
TC23	2.031	0.284	0.267	522	517	802	1841	M	614
JU28	2.622	0.336	0.161	706	644	490	1840	M	615
TH35	2.218	0.259	0.266	583	455	800	1838	M	616
TC20	1.558	0.296	0.323	387	542	908	1837	M	617
TH37	1.767	0.284	0.293	456	516	859	1831	M	618
CU17	2.377	0.360	0.166	638	685	505	1828	M	619
JL29	2.102	0.557	0.124	548	926	354	1828	M	620
NE85	1.399	0.268	0.405	347	478	1001	1826	M	621
JA38	2.228	0.338	0.190	585	647	593	1825	M	622
YO68	2.088	0.514	0.134	544	884	393	1821	M	623
NE73	1.909	0.231	0.346	497	376	936	1809	L	624
YO08	2.439	0.346	0.161	657	661	491	1809	L	625
TH11	1.798	0.267	0.298	465	475	867	1807	L	626
JM36	2.753	0.306	0.162	732	579	494	1805	L	627
NE62	2.120	0.271	0.249	552	488	765	1805	L	628
JU51	1.778	0.263	0.301	461	464	875	1800	L	629
RU89	1.987	0.283	0.252	513	512	774	1799	L	630
RU55	2.697	0.283	0.180	717	514	565	1796	L	631

RD13	1.730	0.268	0.301	437	480	876	1793	L	632
RL13	2.433	0.290	0.195	654	529	610	1793	L	633
CU29	2.070	0.494	0.133	536	868	388	1792	L	634
CU30	2.297	0.517	0.100	611	889	286	1786	L	635
PU04	2.322	0.330	0.171	621	630	532	1783	L	636
RU19	1.817	0.272	0.277	468	489	824	1781	L	637
PS50	1.376	0.361	0.244	342	686	752	1780	L	638
CU13	2.329	0.345	0.162	623	658	495	1776	L	639
JM14	2.000	0.263	0.263	517	465	794	1776	L	640
RU37	2.336	0.267	0.212	625	476	675	1776	L	641
RD23	2.014	0.241	0.282	520	409	840	1769	L	642
JR09	2.570	0.326	0.151	691	621	453	1765	L	643
CU40	2.165	0.502	0.111	570	874	319	1763	L	644
JL48	1.945	0.386	0.170	505	730	528	1763	L	645
JU04	2.194	0.299	0.198	578	553	627	1758	L	646
JM72	1.861	0.309	0.221	482	582	693	1757	L	647
RD38	2.293	0.275	0.205	609	493	653	1755	L	648
CM19	1.999	0.320	0.200	516	604	634	1754	L	649
PL38	2.718	0.334	0.133	725	641	386	1752	L	650
PS80	2.266	0.280	0.203	600	503	645	1748	L	651
CB12	2.152	0.515	0.103	566	887	291	1744	L	652
PS34	2.431	0.413	0.108	653	779	311	1743	L	653
RU26	1.692	0.298	0.249	426	549	766	1741	L	654
RD12	2.155	0.263	0.225	568	466	705	1739	L	655
JL43	2.052	0.529	0.107	529	899	307	1735	L	656
JU81	1.875	0.292	0.229	486	534	715	1735	L	657
PS38	1.983	0.433	0.137	512	813	407	1732	L	658
TC14	2.034	0.257	0.248	524	445	762	1731	L	659
PU20	5.351	0.357	0.002	1036	680	13	1729	L	660
CU34	1.731	0.428	0.160	438	799	488	1725	L	661
JL05	1.593	0.431	0.168	399	808	518	1725	L	662
CU32	2.129	0.491	0.106	556	865	302	1723	L	663
RD62	2.307	0.258	0.205	613	450	652	1715	L	664
RD64	2.234	0.257	0.212	589	446	674	1709	L	665
CU31	1.894	0.440	0.135	492	819	397	1708	L	666
JR12	2.388	0.265	0.191	639	470	597	1706	L	667
JU70	1.669	0.301	0.233	421	558	727	1706	L	668
PL65	1.557	0.413	0.171	386	777	533	1696	L	669
RA52	1.752	0.389	0.167	448	738	510	1696	L	670
JM32	2.248	0.258	0.205	594	449	651	1694	L	671
PS45	1.996	0.316	0.185	515	597	582	1694	L	672
RU44	2.230	0.250	0.212	587	433	673	1693	L	673
JM77	2.090	0.323	0.172	545	610	537	1692	L	674

PS46	1.907	0.301	0.201	495	559	638	1692	L	675
NE43	2.148	0.261	0.211	561	460	669	1690	L	676
CU03	2.261	0.282	0.183	598	510	577	1685	L	677
RD66	2.316	0.260	0.195	618	458	609	1685	L	678
JM67	2.348	0.295	0.168	627	540	516	1683	L	679
JR04	2.155	0.293	0.182	567	536	576	1679	L	680
RD21	1.754	0.268	0.243	449	481	749	1679	L	681
JM06	2.115	0.247	0.224	550	427	701	1678	L	682
TH01	2.388	0.258	0.188	640	451	586	1677	L	683
NE29	2.088	0.259	0.213	543	454	678	1675	L	684
NE05	2.027	0.234	0.248	521	390	761	1672	L	685
RU86	2.085	0.281	0.197	542	508	621	1671	L	686
RD36	2.271	0.260	0.193	602	457	603	1662	L	687
PL62	1.514	0.309	0.224	377	581	702	1660	L	688
RU88	2.549	0.274	0.158	688	491	481	1660	L	689
YO62	1.463	0.387	0.178	367	733	559	1659	L	690
NE74	1.776	0.237	0.265	460	400	796	1656	L	691
PL59	2.275	0.257	0.194	603	447	605	1655	L	692
CM02	2.147	0.293	0.176	560	535	553	1648	L	693
JA31	2.530	0.327	0.117	682	624	333	1639	L	694
AS05	1.929	0.378	0.140	501	715	419	1635	L	695
RA09	2.141	0.218	0.233	558	351	726	1635	L	696
JA13	2.327	0.313	0.141	622	588	423	1633	L	697
JM09	2.035	0.247	0.215	525	426	682	1633	L	698
RL04	1.531	0.268	0.250	381	479	770	1630	L	699
RD47	2.392	0.260	0.169	641	459	524	1624	L	700
CU04	2.412	0.302	0.137	646	568	406	1620	L	701
JM15	1.742	0.255	0.236	444	440	732	1616	L	702
YO27	1.881	0.406	0.126	487	768	361	1616	L	703
JM78	1.961	0.266	0.197	510	472	620	1602	L	704
JL53	2.188	0.474	0.065	576	849	175	1600	L	705
TH09	1.818	0.271	0.203	469	487	644	1600	L	706
JU10	2.064	0.211	0.235	531	339	729	1599	L	707
CU05	2.621	0.324	0.095	705	613	278	1596	L	708
CU37	2.053	0.304	0.162	530	573	493	1596	L	709
RU63	2.515	0.267	0.147	677	477	439	1593	L	710
RU34	2.251	0.243	0.182	597	417	575	1589	L	711
RU73	1.890	0.248	0.211	489	429	668	1586	L	712
PL61	1.026	0.299	0.269	228	552	805	1585	L	713
YO64	1.693	0.431	0.121	429	809	344	1582	L	714
YA05	1.947	0.257	0.199	507	444	630	1581	L	715
NE34	2.150	0.246	0.189	564	423	589	1576	L	716
JL22	1.654	0.413	0.131	411	778	380	1569	L	717

CU22	2.032	0.320	0.146	523	605	438	1566	L	718
CU19	1.891	0.291	0.173	490	531	542	1563	L	719
YO06	2.445	0.289	0.131	658	525	379	1562	L	720
RU61	2.466	0.257	0.149	661	448	448	1557	L	721
JA06	2.584	0.294	0.111	695	539	318	1552	L	722
CU07	2.410	0.280	0.135	644	504	396	1544	L	723
PL32	2.420	0.265	0.140	651	471	418	1540	L	724
RD35	2.198	0.242	0.175	580	412	547	1539	L	725
YO34	1.769	0.387	0.121	458	734	343	1535	L	726
RA49	1.848	0.326	0.144	478	619	435	1532	L	727
JA17	1.775	0.298	0.168	459	550	517	1526	L	728
JM59	2.289	0.283	0.137	607	513	405	1525	L	729
PL43	2.414	0.280	0.128	649	505	366	1520	L	730
YO65	1.586	0.402	0.125	397	762	358	1517	L	731
RA70	1.562	0.343	0.156	388	656	472	1516	L	732
RL11	2.110	0.255	0.170	549	441	526	1516	L	733
RA12	2.275	0.220	0.176	604	356	551	1511	L	734
CU44	1.767	0.405	0.101	455	767	287	1509	L	735
NE88	1.680	0.212	0.241	422	340	741	1503	L	736
RD06	1.909	0.234	0.196	498	389	614	1501	L	737
TC32	1.532	0.231	0.241	382	375	742	1499	L	738
PU09	2.314	0.294	0.120	616	538	339	1493	L	739
RD16	1.510	0.232	0.238	376	379	737	1492	L	740
RD67	2.316	0.252	0.144	619	436	434	1489	L	741
CM09	2.094	0.256	0.163	546	442	496	1484	L	742
JA14	2.435	0.285	0.108	655	518	310	1483	L	743
JL27	1.314	0.343	0.167	319	655	509	1483	L	744
RD10	1.656	0.232	0.218	414	380	688	1482	L	745
JM42	2.248	0.245	0.151	595	420	452	1467	L	746
RD05	1.990	0.254	0.168	514	439	513	1466	L	747
JL24	1.579	0.389	0.116	396	737	330	1463	L	748
JU32	1.573	0.221	0.228	394	357	712	1463	L	749
RA02	2.196	0.207	0.175	579	333	546	1458	L	750
CB18	1.806	0.425	0.072	466	796	195	1457	L	751
JU65	1.536	0.281	0.179	383	506	563	1452	L	752
RL15	1.681	0.234	0.201	423	388	636	1447	L	753
RU90	1.648	0.238	0.201	407	402	637	1446	L	754
CU06	2.491	0.296	0.082	670	545	226	1441	L	755
JA29	2.498	0.299	0.076	671	554	212	1437	L	756
JU30	1.569	0.217	0.223	391	349	697	1437	L	757
CB34	1.794	0.510	0.036	463	879	92	1434	L	758
RU16	1.588	0.223	0.212	398	361	672	1431	L	759
JA16	2.365	0.276	0.106	633	497	300	1430	L	760

PL17	2.419	0.275	0.099	650	494	285	1429	L	761
JU56	1.230	0.200	0.270	292	321	810	1423	L	762
PS32	1.940	0.363	0.082	504	691	227	1422	L	763
RD51	2.072	0.243	0.155	538	416	466	1420	L	764
JL45	1.335	0.283	0.183	330	511	578	1419	L	765
JM45	1.716	0.248	0.178	433	428	558	1419	L	766
RD14	1.348	0.200	0.248	336	322	760	1418	L	767
RA31	1.953	0.304	0.116	508	572	329	1409	L	768
JA05	2.366	0.266	0.105	634	474	297	1405	L	769
JU69	1.455	0.275	0.175	364	492	548	1404	L	770
RD61	1.796	0.238	0.172	464	403	536	1403	L	771
JA30	2.476	0.290	0.075	664	530	207	1401	L	772
CM10	2.242	0.252	0.129	592	435	370	1397	L	773
PL40	2.477	0.285	0.076	666	520	211	1397	L	774
RA11	2.083	0.201	0.171	540	325	531	1396	L	775
RA42	1.866	0.247	0.160	483	425	487	1395	L	776
PU14	2.795	0.333	0.001	745	638	9	1392	L	777
PS47	1.822	0.243	0.166	471	415	504	1390	L	778
NE45	2.234	0.265	0.116	588	469	328	1385	L	779
JA25	1.895	0.290	0.127	493	527	364	1384	L	780
AO03	1.575	0.487	0.047	395	860	124	1379	L	781
CM15	1.649	0.260	0.168	408	456	514	1378	L	782
RL14	1.845	0.224	0.172	476	365	535	1376	L	783
RA03	1.646	0.180	0.217	406	281	686	1373	L	784
RU75	1.938	0.239	0.154	503	405	463	1371	L	785
NE18	1.437	0.233	0.198	360	385	625	1370	L	786
RA51	1.740	0.304	0.124	442	571	353	1366	L	787
RD09	2.008	0.245	0.143	518	419	428	1365	L	788
JU64	1.308	0.276	0.176	316	495	552	1363	L	789
CU45	1.608	0.374	0.089	401	707	253	1361	L	790
RU72	2.038	0.223	0.156	526	362	471	1359	L	791
JR21	1.909	0.221	0.166	496	358	502	1356	L	792
YO36	1.496	0.361	0.102	375	687	288	1350	L	793
RD32	1.764	0.235	0.166	453	393	503	1349	L	794
CU27	1.738	0.286	0.131	439	523	378	1340	L	795
CM18	1.884	0.274	0.126	488	490	360	1338	L	796
CB08	1.420	0.370	0.095	353	698	279	1330	L	797
RD60	1.867	0.232	0.154	484	382	462	1328	L	798
JM17	1.538	0.219	0.190	384	352	591	1327	L	799
PL63	1.393	0.264	0.168	345	467	515	1327	L	800
RA43	1.342	0.223	0.199	332	360	629	1321	L	801
PL16	1.816	0.198	0.172	467	316	534	1317	L	802
JM75	1.453	0.235	0.177	363	392	554	1309	L	803

NE02	1.237	0.198	0.223	297	311	696	1304	L	804
RL16	1.565	0.229	0.173	390	371	541	1302	L	805
RD31	1.855	0.235	0.143	480	394	425	1299	L	806
YO33	1.136	0.313	0.150	261	587	450	1298	L	807
YA06	2.123	0.216	0.135	553	348	395	1296	L	808
RL22	1.602	0.263	0.143	400	463	429	1292	L	809
NE83	1.404	0.162	0.224	348	243	700	1291	L	810
CM13	1.857	0.280	0.106	481	502	301	1284	L	811
NE78	1.663	0.234	0.157	418	387	478	1283	L	812
PU12	2.099	0.265	0.093	547	468	268	1283	L	813
JM37	2.065	0.269	0.092	533	484	264	1281	L	814
YO52	1.331	0.321	0.122	327	606	348	1281	L	815
TC10	1.440	0.195	0.196	361	306	613	1280	L	816
PS14	1.693	0.316	0.090	428	596	255	1279	L	817
YO35	1.135	0.305	0.148	260	575	443	1278	L	818
JM25	1.930	0.262	0.109	502	462	312	1276	L	819
YO20	1.370	0.206	0.193	341	330	602	1273	L	820
PU17	1.707	0.214	0.164	431	342	499	1272	L	821
RD76	1.459	0.208	0.181	366	334	572	1272	L	822
RD33	1.292	0.195	0.206	310	305	656	1271	L	823
RU05	1.161	0.180	0.231	272	279	719	1270	L	824
PS29	1.976	0.332	0.043	511	636	111	1258	L	825
YO51	1.333	0.294	0.134	329	537	392	1258	L	826
JM19	1.763	0.236	0.137	452	398	404	1254	L	827
JM28	1.688	0.229	0.152	424	372	456	1252	L	828
RA22	1.769	0.232	0.138	457	381	410	1248	L	829
YO41	1.658	0.259	0.131	417	453	377	1247	L	830
JA21	1.821	0.262	0.110	470	461	314	1245	L	831
TC24	1.493	0.220	0.168	373	354	512	1239	L	832
JU82	1.202	0.215	0.194	287	345	604	1236	L	833
CB33	1.423	0.394	0.048	354	748	126	1228	L	834
JM65	2.071	0.239	0.097	537	406	283	1226	L	835
TH28	1.715	0.207	0.153	432	332	458	1222	L	836
YO46	1.360	0.284	0.127	339	515	363	1217	L	837
JA08	2.173	0.241	0.084	572	410	234	1216	L	838
YO22	1.333	0.175	0.197	328	268	619	1215	L	839
JR16	1.855	0.228	0.128	479	370	365	1214	L	840
YO07	2.042	0.234	0.105	527	391	296	1214	L	841
NE27	1.621	0.228	0.146	404	368	437	1209	L	842
TH32	1.314	0.198	0.181	320	312	571	1203	L	843
CM12	1.742	0.239	0.123	443	404	350	1197	L	844
JA07	1.907	0.240	0.104	494	408	294	1196	L	845
CM08	1.699	0.230	0.134	430	373	391	1194	L	846

CM06	1.492	0.210	0.160	372	336	485	1193	L	847
YO59	1.122	0.301	0.130	256	557	373	1186	L	848
NE59	2.781	0.249	0.001	741	431	8	1180	L	849
TH25	1.430	0.236	0.143	358	396	426	1180	L	850
JL20	1.355	0.311	0.089	338	586	252	1176	L	851
YO32	1.156	0.280	0.136	271	501	402	1174	L	852
CM01	1.520	0.198	0.158	380	313	480	1173	L	853
JM84	2.010	0.232	0.094	519	383	271	1173	L	854
CL02	1.173	0.250	0.153	276	432	459	1167	L	855
RD27	1.564	0.189	0.157	389	296	477	1162	L	856
YO40	1.469	0.200	0.156	368	323	470	1161	L	857
JM64	1.787	0.210	0.125	462	338	357	1157	L	858
JU66	1.425	0.194	0.164	355	303	498	1156	L	859
RU13	1.310	0.164	0.187	318	247	585	1150	L	860
JR20	1.742	0.206	0.130	445	331	372	1148	L	861
CU16	1.253	0.233	0.152	302	384	457	1143	L	862
RU85	1.738	0.198	0.133	440	315	385	1140	L	863
RD30	1.473	0.180	0.161	369	280	489	1138	L	864
RU80	1.748	0.205	0.126	447	329	359	1135	L	865
RD25	1.264	0.161	0.189	304	240	588	1132	L	866
JU63	1.284	0.246	0.136	308	422	401	1131	L	867
JU03	1.348	0.181	0.167	335	283	508	1126	L	868
YO04	1.649	0.218	0.127	409	350	362	1121	L	869
RA23	1.572	0.198	0.139	393	314	413	1120	L	870
JM68	1.758	0.243	0.089	450	414	251	1115	L	871
JA09	1.721	0.226	0.107	434	367	306	1107	L	872
JL55	1.409	0.316	0.057	350	595	156	1101	L	873
YO24	1.846	0.230	0.089	477	374	250	1101	L	874
YO43	1.352	0.181	0.157	337	284	476	1097	L	875
JR22	1.658	0.196	0.129	416	309	369	1094	L	876
CU20	1.405	0.214	0.137	349	341	403	1093	L	877
CM16	1.655	0.228	0.108	413	369	309	1091	L	878
YA01	0.801	0.247	0.160	178	424	486	1088	L	879
RD28	1.343	0.169	0.164	333	257	497	1087	L	880
YO69	1.325	0.326	0.054	323	617	147	1087	L	881
CL03	1.151	0.240	0.138	268	407	411	1086	L	882
CU23	1.432	0.238	0.113	359	401	323	1083	L	883
RU81	1.635	0.186	0.133	405	294	384	1083	L	884
PU11	1.689	0.236	0.091	425	397	257	1079	L	885
RL20	1.248	0.232	0.136	300	378	400	1078	L	886
YO05	1.766	0.220	0.092	454	355	262	1071	L	887
YO28	1.264	0.253	0.113	305	438	324	1067	L	888
JL21	1.268	0.292	0.082	306	533	225	1064	L	889

RU06	2.438	0.235	0.002	656	395	12	1063	L	890
JA03	1.621	0.203	0.117	403	326	332	1061	L	891
CU14	1.657	0.226	0.095	415	366	277	1058	L	892
JM43	1.515	0.210	0.121	379	337	342	1058	L	893
PS49	0.991	0.243	0.143	217	413	427	1057	L	894
JA32	1.721	0.244	0.074	435	418	202	1055	L	895
JL50	1.298	0.315	0.056	313	591	151	1055	L	896
PL64	1.077	0.204	0.160	243	327	484	1054	L	897
JL23	1.229	0.302	0.073	291	562	199	1052	L	898
RD29	1.141	0.152	0.179	264	224	562	1050	L	899
CM11	1.823	0.199	0.090	472	318	254	1044	L	900
YO39	1.556	0.195	0.124	385	307	352	1044	L	901
YO48	1.097	0.253	0.123	250	437	351	1038	L	902
JU09	1.194	0.153	0.170	284	226	525	1035	L	903
JR15	1.240	0.150	0.168	298	223	511	1032	L	904
RA44	1.172	0.174	0.157	275	267	474	1016	L	905
RU82	1.321	0.178	0.140	321	276	417	1014	L	906
RU27	1.084	0.159	0.171	244	236	530	1010	L	907
RL09	1.132	0.178	0.157	258	272	475	1005	L	908
YO23	1.292	0.181	0.139	311	282	412	1005	L	909
JM20	1.329	0.193	0.131	324	302	376	1002	L	910
JU02	1.429	0.197	0.118	357	310	335	1002	L	911
PS54	1.330	0.249	0.088	325	430	247	1002	L	912
JA18	1.669	0.216	0.084	420	347	233	1000	L	913
CU26	1.669	0.224	0.077	419	364	215	998	L	914
JM38	1.515	0.204	0.103	378	328	290	996	L	915
RL18	1.388	0.171	0.134	344	261	390	995	L	916
RD22	1.199	0.148	0.162	286	216	492	994	L	917
YO44	1.440	0.181	0.122	362	285	347	994	L	918
JA37	1.480	0.220	0.094	370	353	270	993	L	919
JM58	1.572	0.192	0.106	392	301	299	992	L	920
RU28	0.993	0.174	0.166	218	266	501	985	L	921
PU10	1.459	0.209	0.098	365	335	284	984	L	922
JA12	1.297	0.178	0.135	312	275	394	981	L	923
NE87	1.087	0.170	0.157	246	258	473	977	L	924
YO42	1.053	0.237	0.118	235	399	336	970	L	925
YO13	1.396	0.192	0.112	346	300	320	966	L	926
RU38	1.208	0.158	0.148	288	235	442	965	L	927
RD18	1.042	0.183	0.149	230	287	447	964	L	928
BS22	0.818	0.133	0.189	183	190	587	960	L	929
JU34	1.220	0.169	0.140	290	254	416	960	L	930
BS35	0.656	0.148	0.191	138	214	596	948	L	931
YO50	1.127	0.259	0.086	257	452	239	948	L	932

JL44	0.937	0.200	0.142	204	319	424	947	L	933
JM07	1.135	0.153	0.154	259	225	461	945	L	934
JM33	1.048	0.162	0.155	233	241	465	939	L	935
PL60	0.811	0.145	0.175	182	209	545	936	L	936
CB09	1.045	0.270	0.079	232	485	218	935	L	937
JM60	1.175	0.182	0.129	277	286	368	931	L	938
YO21	1.410	0.191	0.097	351	298	282	931	L	939
PU07	0.875	0.246	0.111	192	421	317	930	L	940
BS01	0.832	0.116	0.184	187	154	579	920	L	941
JM31	1.232	0.153	0.136	294	227	398	919	L	942
CM05	1.302	0.165	0.125	314	248	356	918	L	943
JL04	0.946	0.257	0.092	206	443	263	912	L	944
CU12	1.495	0.200	0.076	374	324	210	908	L	945
RD24	1.236	0.125	0.141	296	176	422	894	L	946
YO53	0.924	0.224	0.116	202	363	327	892	L	947
CU09	1.331	0.187	0.092	326	295	261	882	L	948
JM85	1.282	0.169	0.111	307	256	316	879	L	949
YO30	1.062	0.215	0.104	240	344	293	877	L	950
CM14	1.414	0.191	0.081	352	299	223	874	L	951
NE70	1.147	0.161	0.129	266	239	367	872	L	952
YO26	1.088	0.232	0.087	247	377	246	870	L	953
JM80	1.231	0.169	0.107	293	255	305	853	L	954
TC03	1.011	0.127	0.151	222	177	451	850	L	955
JA11	1.310	0.172	0.093	317	264	266	847	L	956
JM70	1.482	0.186	0.067	371	293	182	846	L	957
CU02	1.110	0.167	0.121	252	252	341	845	L	958
PS77	1.179	0.200	0.087	278	320	245	843	L	959
JA23	1.368	0.186	0.075	340	292	206	838	L	960
JM69	1.247	0.170	0.095	299	260	276	835	L	961
JU29	1.346	0.196	0.070	334	308	191	833	L	962
RU45	1.185	0.149	0.117	280	219	331	830	L	963
YO47	1.071	0.234	0.074	242	386	201	829	L	964
PU15	1.186	0.179	0.094	281	277	269	827	L	965
RA45	1.062	0.172	0.115	239	262	326	827	L	966
RL08	0.870	0.156	0.136	191	231	399	821	L	967
JM76	1.194	0.186	0.087	283	291	244	818	L	968
JM03	1.142	0.157	0.111	265	234	315	814	L	969
BS33	0.895	0.121	0.152	195	163	455	813	L	970
RD26	0.901	0.113	0.156	197	145	469	811	L	971
JL17	1.112	0.222	0.073	253	359	198	810	L	972
JM41	1.056	0.150	0.123	236	221	349	806	L	973
JA19	1.253	0.177	0.084	303	269	231	803	L	974
JM55	1.199	0.162	0.095	285	242	275	802	L	975

JA22	1.340	0.156	0.085	331	233	236	800	L	976
YO38	1.162	0.186	0.084	273	290	232	795	L	977
JM34	1.155	0.170	0.093	270	259	265	794	L	978
RU84	1.049	0.142	0.125	234	203	355	792	L	979
JL16	1.219	0.172	0.086	289	263	238	790	L	980
PL58	0.771	0.133	0.144	164	189	433	786	L	981
JR19	1.251	0.145	0.095	301	210	274	785	L	982
PU13	1.234	0.178	0.077	295	274	214	783	L	983
RL21	1.085	0.169	0.097	245	253	281	779	L	984
BS21	0.564	0.121	0.160	125	162	483	770	L	985
PL34	1.427	0.154	0.066	356	229	179	764	L	986
JU12	1.044	0.133	0.121	231	192	340	763	L	987
PL44	1.384	0.148	0.073	343	217	196	756	L	988
NE77	1.147	0.178	0.076	267	273	209	749	L	989
PS65	1.112	0.190	0.070	254	297	190	741	L	990
RL23	1.152	0.166	0.081	269	250	222	741	L	991
JM35	1.286	0.166	0.066	309	251	180	740	L	992
JM11	0.956	0.119	0.130	209	159	371	739	L	993
JA28	1.325	0.177	0.054	322	270	146	738	L	994
JR14	0.959	0.106	0.134	210	135	389	734	L	995
NE68	1.188	0.164	0.074	282	246	200	728	L	996
YO56	0.909	0.215	0.069	199	343	186	728	L	997
RU08	0.984	0.144	0.106	216	206	298	720	L	998
YO19	1.025	0.140	0.104	227	201	292	720	L	999
CM04	0.995	0.136	0.107	219	196	304	719	L	1000
JL26	0.745	0.186	0.093	157	288	267	712	L	1001
JM83	1.098	0.156	0.083	251	232	229	712	L	1002
BS32	0.509	0.116	0.149	111	150	446	707	L	1003
JU37	0.899	0.131	0.113	196	185	322	703	L	1004
JU33	0.866	0.139	0.110	190	199	313	702	L	1005
JA10	1.303	0.159	0.056	315	237	149	701	L	1006
RU07	1.739	0.163	0.001	441	244	7	692	L	1007
YO49	0.823	0.186	0.079	184	289	217	690	L	1008
JL34	0.786	0.199	0.073	168	317	197	682	L	1009
PU08	1.060	0.155	0.077	238	230	213	681	L	1010
JL54	1.031	0.216	0.039	229	346	100	675	L	1011
JU17	1.168	0.150	0.066	274	222	178	674	L	1012
NE81	0.798	0.112	0.120	175	144	338	657	L	1013
JM50	1.059	0.129	0.086	237	181	237	655	L	1014
TC05	0.979	0.128	0.092	214	179	260	653	L	1015
JM54	1.095	0.144	0.072	249	207	194	650	L	1016
CM07	0.980	0.132	0.087	215	186	243	644	L	1017
BS30	0.781	0.104	0.122	166	131	346	643	L	1018

RL17	0.810	0.122	0.105	181	165	295	641	L	1019
PS72	1.013	0.154	0.070	223	228	189	640	L	1020
YA02	0.792	0.147	0.091	171	212	256	639	L	1021
JM66	1.180	0.144	0.055	279	208	148	635	L	1022
CM23	0.942	0.146	0.079	205	211	216	632	L	1023
JL28	0.747	0.195	0.060	158	304	165	627	L	1024
JU05	0.847	0.137	0.085	188	197	235	620	L	1025
AS01	0.963	0.180	0.049	211	278	130	619	L	1026
PS53	0.905	0.178	0.056	198	271	150	619	L	1027
JM57	0.977	0.139	0.075	213	200	204	617	L	1028
JM71	1.138	0.143	0.054	262	205	144	611	L	1029
JU40	0.917	0.130	0.083	200	183	228	611	L	1030
CM22	1.113	0.148	0.053	255	215	136	606	L	1031
JA45	0.726	0.174	0.067	153	265	181	599	L	1032
JU36	0.936	0.134	0.075	203	193	203	599	L	1033
JM53	1.024	0.135	0.066	226	195	177	598	L	1034
CB26	0.487	0.131	0.108	105	184	308	597	L	1035
BS31	0.681	0.112	0.107	147	143	303	593	L	1036
RD17	0.801	0.124	0.087	177	172	242	591	L	1037
RD42	1.090	0.129	0.058	248	182	160	590	L	1038
JM40	0.947	0.120	0.081	207	161	221	589	L	1039
JM52	1.018	0.135	0.059	224	194	164	582	L	1040
JU50	0.801	0.117	0.089	176	155	249	580	L	1041
JM63	1.018	0.138	0.057	225	198	155	578	L	1042
PS51	0.805	0.164	0.054	179	245	145	569	L	1043
BS17	0.313	0.082	0.132	79	106	383	568	L	1044
PU01	0.738	0.143	0.075	156	204	205	565	L	1045
JM05	0.796	0.124	0.080	173	171	219	563	L	1046
RU15	0.796	0.102	0.092	174	129	259	562	L	1047
JU31	0.733	0.122	0.087	154	164	241	559	L	1048
NE72	0.881	0.133	0.064	193	191	173	557	L	1049
JA34	1.068	0.147	0.039	241	213	99	553	L	1050
PS76	0.783	0.149	0.061	167	218	168	553	L	1051
PL19	1.139	0.122	0.043	263	167	108	538	L	1052
CM17	0.919	0.125	0.058	201	175	159	535	L	1053
CU01	0.972	0.124	0.054	212	173	143	528	L	1054
PL20	0.885	0.129	0.057	194	180	154	528	L	1055
NE69	0.852	0.122	0.059	189	166	163	518	L	1056
BS34	0.358	0.083	0.115	82	109	325	516	L	1057
JA40	0.753	0.160	0.045	161	238	116	515	L	1058
JM73	1.007	0.123	0.047	221	170	123	514	L	1059
NE41	0.827	0.116	0.064	186	153	172	511	L	1060
BS24	0.521	0.082	0.103	113	107	289	509	L	1061

RD20	0.654	0.099	0.089	137	124	248	509	L	1062
JL31	0.671	0.166	0.043	145	249	110	504	L	1063
NE75	0.620	0.106	0.082	135	133	224	492	L	1064
JM51	0.787	0.107	0.068	169	137	183	489	L	1065
RA46	0.760	0.109	0.070	163	139	187	489	L	1066
RU10	0.543	0.083	0.092	120	111	258	489	L	1067
CB25	0.511	0.107	0.087	112	136	240	488	L	1068
JM21	0.806	0.125	0.050	180	174	131	485	L	1069
RU09	0.710	0.081	0.084	150	105	230	485	L	1070
BS16	0.438	0.088	0.095	95	116	273	484	L	1071
CU08	1.002	0.118	0.040	220	157	103	480	L	1072
TH30	0.628	0.114	0.070	136	147	188	471	L	1073
JU46	0.953	0.123	0.036	208	169	91	468	L	1074
CB07	0.594	0.150	0.045	132	220	115	467	L	1075
JU11	0.662	0.078	0.081	140	101	220	461	L	1076
PS73	0.750	0.106	0.061	159	134	167	460	L	1077
PL48	0.397	0.058	0.097	88	86	280	454	L	1078
AS04	0.781	0.141	0.034	165	202	86	453	L	1079
CU15	0.664	0.110	0.062	141	142	170	453	L	1080
JU68	0.692	0.123	0.053	149	168	135	452	L	1081
JM01	0.792	0.118	0.047	170	156	122	448	L	1082
CU10	0.827	0.108	0.040	185	138	102	425	L	1083
JL19	0.689	0.133	0.035	148	188	88	424	L	1084
TH34	0.752	0.116	0.044	160	151	112	423	L	1085
JU44	0.793	0.116	0.037	172	152	95	419	L	1086
JL03	0.553	0.133	0.043	122	187	109	418	L	1087
JU22	0.533	0.082	0.071	117	108	193	418	L	1088
PS52	0.604	0.128	0.041	133	178	107	418	L	1089
PS66	0.473	0.110	0.065	101	140	174	415	L	1090
RA47	0.593	0.100	0.058	131	126	158	415	L	1091
BS02	0.563	0.076	0.069	124	97	185	406	L	1092
JM56	0.711	0.099	0.049	151	125	129	405	L	1093
JM81	0.721	0.090	0.051	152	119	133	404	L	1094
JM74	0.758	0.095	0.047	162	121	120	403	L	1095
JU19	0.661	0.081	0.058	139	104	157	400	L	1096
RU12	0.479	0.063	0.076	102	89	208	399	L	1097
CL05	0.492	0.114	0.054	106	146	142	394	L	1098
JU62	0.541	0.120	0.045	119	160	114	393	L	1099
PL54	0.170	0.045	0.095	51	68	272	391	L	1100
JU27	0.668	0.115	0.038	144	149	96	389	L	1101
JU45	0.734	0.103	0.039	155	130	98	383	L	1102
AS03	0.507	0.110	0.047	110	141	121	372	L	1103
AS06	0.613	0.119	0.030	134	158	79	371	L	1104

JA39	0.583	0.090	0.047	129	118	119	366	L	1105
TC17	0.412	0.065	0.069	92	90	184	366	L	1106
JU20	0.577	0.074	0.054	127	95	140	362	L	1107
PL56	0.486	0.059	0.063	104	87	171	362	L	1108
TC21	0.567	0.069	0.054	126	91	139	356	L	1109
BS23	0.303	0.051	0.071	77	81	192	350	L	1110
JU41	0.559	0.090	0.041	123	117	106	346	L	1111
PS71	0.581	0.105	0.034	128	132	84	344	L	1112
JU06	0.363	0.073	0.061	83	94	166	343	L	1113
TH04	0.535	0.102	0.039	118	128	97	343	L	1114
JL01	0.495	0.115	0.034	108	148	85	341	L	1115
JU49	0.461	0.078	0.054	98	99	141	338	L	1116
JU79	0.546	0.101	0.036	121	127	90	338	L	1117
JU48	0.665	0.084	0.032	142	113	81	336	L	1118
JU18	0.676	0.096	0.020	146	122	52	320	L	1119
JU26	0.524	0.098	0.034	114	123	83	320	L	1120
NE44	0.529	0.081	0.040	116	103	101	320	L	1121
JM10	0.447	0.051	0.054	96	82	138	316	L	1122
JU43	0.585	0.086	0.027	130	115	68	313	L	1123
BS05	0.219	0.049	0.066	57	76	176	309	L	1124
JU38	0.470	0.084	0.037	100	112	94	306	L	1125
PL46	0.387	0.040	0.057	87	61	152	300	L	1126
JL52	0.495	0.094	0.027	109	120	69	298	L	1127
PL18	0.667	0.069	0.025	143	92	61	296	L	1128
BS25	0.263	0.041	0.059	67	62	162	291	L	1129
TC04	0.398	0.043	0.053	89	67	134	290	L	1130
RU14	0.378	0.049	0.048	86	78	125	289	L	1131
BS28	0.295	0.047	0.054	75	74	137	286	L	1132
PL51	0.223	0.033	0.062	59	55	169	283	L	1133
JR03	0.465	0.079	0.029	99	102	77	278	L	1134
PL23	0.346	0.041	0.051	81	63	132	276	L	1135
JA36	0.481	0.075	0.029	103	96	76	275	L	1136
NE80	0.453	0.077	0.030	97	98	78	273	L	1137
BS09	0.261	0.049	0.049	65	77	128	270	L	1138
JA44	0.424	0.085	0.025	94	114	62	270	L	1139
JU15	0.417	0.060	0.036	93	88	89	270	L	1140
BS03	0.133	0.047	0.057	44	72	153	269	L	1141
PL57	0.179	0.031	0.059	54	52	161	267	L	1142
JA35	0.492	0.070	0.026	107	93	65	265	L	1143
JU47	0.529	0.078	0.017	115	100	44	259	L	1144
JU61	0.366	0.083	0.024	84	110	58	252	L	1145
PL49	0.307	0.033	0.045	78	56	113	247	L	1146
PL41	0.268	0.030	0.049	68	50	127	245	L	1147

JU39	0.301	0.054	0.028	76	84	72	232	L	1148
PL21	0.409	0.042	0.029	90	65	75	230	L	1149
BS13	0.172	0.038	0.046	52	60	117	229	L	1150
PL47	0.255	0.028	0.047	63	47	118	228	L	1151
JA41	0.411	0.049	0.022	91	79	54	224	L	1152
JU77	0.220	0.058	0.028	58	85	73	216	L	1153
RD39	0.260	0.036	0.035	64	59	87	210	L	1154
JU21	0.289	0.031	0.033	73	53	82	208	L	1155
JM04	0.281	0.050	0.022	72	80	55	207	L	1156
JU23	0.280	0.045	0.025	71	70	60	201	L	1157
JA42	0.331	0.045	0.019	80	71	49	200	L	1158
BS08	0.124	0.031	0.041	42	51	105	198	L	1159
JU24	0.279	0.032	0.029	70	54	74	198	L	1160
JU13	0.275	0.047	0.019	69	73	50	192	L	1161
PL52	0.149	0.021	0.041	48	39	104	191	L	1162
PL45	0.367	0.033	0.018	85	57	47	189	L	1163
PL53	0.172	0.023	0.037	53	43	93	189	L	1164
JU07	0.236	0.048	0.020	61	75	51	187	L	1165
JA43	0.290	0.042	0.018	74	64	48	186	L	1166
RA50	0.262	0.054	0.013	66	83	35	184	L	1167
BS10	0.148	0.029	0.031	47	48	80	175	L	1168
JU67	0.224	0.045	0.014	60	69	39	168	L	1169
BS18	0.135	0.034	0.025	45	58	59	162	L	1170
TC15	0.143	0.024	0.028	46	44	71	161	L	1171
JL18	0.212	0.043	0.012	56	66	33	155	L	1172
PL22	0.196	0.016	0.027	55	33	66	154	L	1173
JU57	0.163	0.023	0.024	49	42	57	148	L	1174
TP02	0.132	0.022	0.026	43	41	63	147	L	1175
BS04	0.108	0.025	0.026	37	45	64	146	L	1176
BS29	0.112	0.021	0.027	41	38	67	146	L	1177
JL02	0.246	0.027	0.014	62	46	38	146	L	1178
BS11	0.096	0.022	0.028	34	40	70	144	L	1179
JU14	0.165	0.029	0.016	50	49	43	142	L	1180
BS20	0.090	0.018	0.022	33	37	53	123	L	1181
TP04	0.071	0.018	0.024	29	35	56	120	L	1182
PL50	0.111	0.016	0.018	40	32	46	118	L	1183
PL29	0.103	0.010	0.018	36	22	45	103	L	1184
TC19	0.076	0.012	0.015	30	25	41	96	L	1185
PL55	0.099	0.013	0.012	35	28	32	95	L	1186
PL30	0.109	0.009	0.014	38	19	37	94	L	1187
YO67	0.084	0.018	0.007	31	36	26	93	L	1188
JM86	0.111	0.014	0.005	39	30	21	90	L	1189
TP07	0.066	0.010	0.016	27	21	42	90	L	1190

JU08	0.071	0.017	0.008	28	34	27	89	L	1191
BS19	0.054	0.011	0.013	24	24	34	82	L	1192
BS27	0.059	0.013	0.012	25	26	31	82	L	1193
BS26	0.041	0.010	0.015	19	20	40	79	L	1194
CB21	0.088	0.013	0.005	32	27	19	78	L	1195
PS18	0.048	0.015	0.006	22	31	24	77	L	1196
NE42	0.066	0.014	0.005	26	29	20	75	L	1197
TP08	0.042	0.008	0.014	20	17	36	73	L	1198
BS12	0.046	0.009	0.011	21	18	30	69	L	1199
TP01	0.033	0.008	0.010	16	16	29	61	L	1200
PS17	0.033	0.011	0.003	15	23	17	55	L	1201
PL28	0.035	0.006	0.006	17	14	23	54	L	1202
PL26	0.053	0.004	0.005	23	9	18	50	L	1203
PL24	0.032	0.004	0.009	14	7	28	49	L	1204
PL27	0.037	0.004	0.006	18	8	22	48	L	1205
BS15	0.020	0.005	0.007	9	11	25	45	L	1206
PS12	0.028	0.008	0.002	13	15	11	39	L	1207
JU35	0.021	0.005	0.002	10	12	10	32	L	1208
JL38	0.028	0.006	0.001	12	13	6	31	L	1209
BS14	0.014	0.003	0.003	6	6	16	28	L	1210
BS06	0.009	0.003	0.003	5	5	15	25	L	1211
PS13	0.015	0.005	0.001	7	10	5	22	L	1212
BS07	0.006	0.002	0.003	4	3	14	21	L	1213
CB22	0.016	0.002	0.001	8	4	4	16	L	1214
AO18	0.027	0.000	0.000	11	1	1	13	L	1215
TP03	0.003	0.001	0.001	2	2	3	7	L	1216
PL25	0.005	0.000	0.001	3	1	2	6	L	1217
AO05	0.000	0.000	0.000	1	1	1	3	L	1218
AO06	0.000	0.000	0.000	1	1	1	3	L	1219
AO07	0.000	0.000	0.000	1	1	1	3	L	1220
AO11	0.000	0.000	0.000	1	1	1	3	L	1221
AO12	0.000	0.000	0.000	1	1	1	3	L	1222
AO15	0.000	0.000	0.000	1	1	1	3	L	1223
AO16	0.000	0.000	0.000	1	1	1	3	L	1224
AO17	0.000	0.000	0.000	1	1	1	3	L	1225
AO19	0.000	0.000	0.000	1	1	1	3	L	1226
AO22	0.000	0.000	0.000	1	1	1	3	L	1227
AO23	0.000	0.000	0.000	1	1	1	3	L	1228
AO24	0.000	0.000	0.000	1	1	1	3	L	1229
AO25	0.000	0.000	0.000	1	1	1	3	L	1230
AO26	0.000	0.000	0.000	1	1	1	3	L	1231
CB20	0.000	0.000	0.000	1	1	1	3	L	1232
CB23	0.000	0.000	0.000	1	1	1	3	L	1233

CB24	0.000	0.000	0.000	1	1	1	3	L	1234
CB29	0.000	0.000	0.000	1	1	1	3	L	1235
CB40	0.000	0.000	0.000	1	1	1	3	L	1236
CB47	0.000	0.000	0.000	1	1	1	3	L	1237
JL56	0.000	0.000	0.000	1	1	1	3	L	1238
JL57	0.000	0.000	0.000	1	1	1	3	L	1239
JL58	0.000	0.000	0.000	1	1	1	3	L	1240
JL59	0.000	0.000	0.000	1	1	1	3	L	1241
JU16	0.000	0.000	0.000	1	1	1	3	L	1242
PL74	0.000	0.000	0.000	1	1	1	3	L	1243
RD40	0.000	0.000	0.000	1	1	1	3	L	1244
TC35	0.000	0.000	0.000	1	1	1	3	L	1245
TH05	0.000	0.000	0.000	1	1	1	3	L	1246
TH46	0.000	0.000	0.000	1	1	1	3	L	1247

Attachment B

Drainage Basins in Each Soil and Water Conservation District

SWCD	Location
APPOMATTOX RIVER	Both
BIG SANDY	OCB
BIG WALKER	OCB
BLUE RIDGE	Both
CHOWAN BASIN	OCB
CLINCH VALLEY	OCB
COLONIAL	CB
CULPEPER	CB
DANIEL BOONE	OCB
EASTERN SHORE	Both
EVERGREEN	OCB
HALIFAX	OCB
HANOVER-CAROLINE	CB
HEADWATERS	CB
HENRICOPOLIS	CB
HOLSTON RIVER	OCB
JAMES RIVER	Both
JOHN MARSHALL	CB
LAKE COUNTRY	OCB
LONESOME PINE	OCB
LORD FAIRFAX	CB
LOUDOUN	CB
MONACAN	CB
MOUNTAIN	CB
MOUNTAIN CASTLES	Both
NATURAL BRIDGE	CB
NEW RIVER	OCB
NORTHERN NECK	CB
NORTHERN VA	CB
PATRICK	OCB
PEAKS OF OTTER	Both
PEANUT	Both
PETER FRANCISCO	CB
PIEDMONT	Both
PITTSYLVANIA	OCB
PRINCE WILLIAM	CB
ROBERT E. LEE	Both
SCOTT COUNTY	OCB
SHENANDOAH VALLEY	CB
SKYLINE	Both
SOUTHSIDE	OCB
TAZEWELL	OCB
THOMAS JEFFERSON	CB
THREE RIVERS	CB
TIDEWATER	CB
TRI-COUNTY/CITY	CB
VIRGINIA DARE	Both

Attachment C

This attachment provides data by Drainage Basin (CB and OCB), District, Agricultural Pollutant Potential Rank (H, M, and L), Total Area (ha) of Hydrologic Units in each District by Agricultural Pollutant Potential Rank and Drainage Basin, and the resulting Percentage Rank (Cost-share Multiplier).

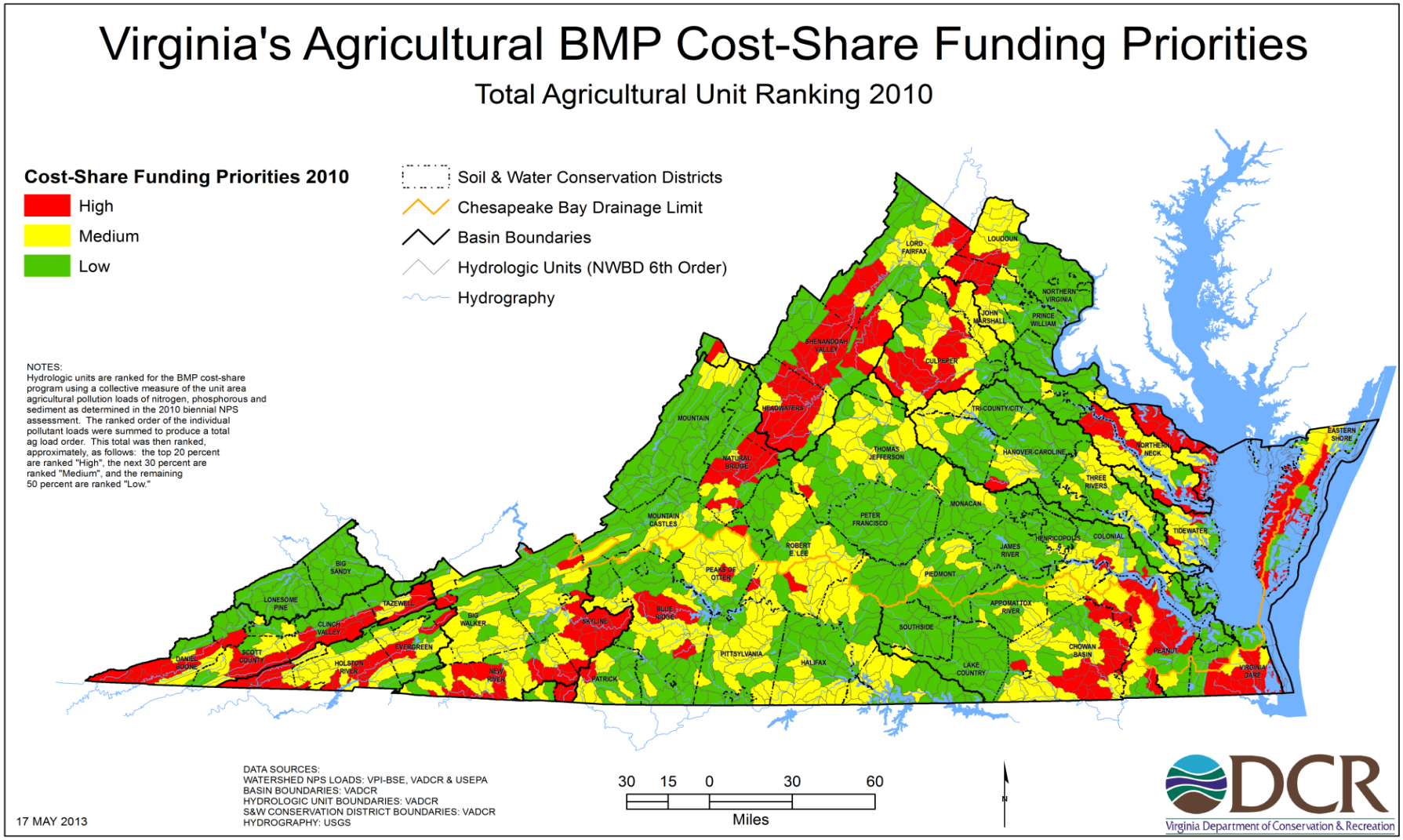
Drainage Basin	SWCD Number	District Name	Agricultural Pollutant Potential Rank	Total Area (ha) of Hydrologic Units in each District by Agricultural Pollutant Potential Rank and Drainage Basin	Percentage Rank (Cost-share Multiplier)
CB	1	TIDEWATER	H	29938.997	0.0292
CB	1	TIDEWATER	L	40685.507	0.0132
CB	1	TIDEWATER	M	72955.215	0.0454
CB	2	THOMAS JEFFERSON	H	4511.400	0.0044
CB	2	THOMAS JEFFERSON	L	303074.804	0.0986
CB	2	THOMAS JEFFERSON	M	213232.776	0.1327
CB	3	SOUTHSIDE	L	71.685	0.0000
CB	4	NATURAL BRIDGE	H	78484.697	0.0766
CB	4	NATURAL BRIDGE	L	47103.764	0.0153
CB	4	NATURAL BRIDGE	M	32117.064	0.0200
CB	5	PIEDMONT	L	175827.642	0.0572
CB	5	PIEDMONT	M	47525.987	0.0296
CB	6	BLUE RIDGE	L	1967.282	0.0006
CB	6	BLUE RIDGE	M	4770.914	0.0030
CB	7	CULPEPER	H	131139.997	0.1281
CB	7	CULPEPER	L	85253.551	0.0277
CB	7	CULPEPER	M	164538.187	0.1024
CB	8	NORTHERN NECK	H	112246.829	0.1096
CB	8	NORTHERN NECK	L	13673.802	0.0044
CB	8	NORTHERN NECK	M	99514.323	0.0619
CB	9	SHENANDOAH VALLEY	H	150939.003	0.1474
CB	9	SHENANDOAH VALLEY	L	114507.687	0.0373
CB	9	SHENANDOAH VALLEY	M	41159.202	0.0256
CB	10	ROBERT E. LEE	L	120930.663	0.0393
CB	10	ROBERT E. LEE	M	95035.814	0.0591
CB	12	JAMES RIVER	H	2439.671	0.0024
CB	12	JAMES RIVER	L	112008.807	0.0364
CB	12	JAMES RIVER	M	34564.552	0.0215
CB	13	LORD FAIRFAX	H	88383.566	0.0863
CB	13	LORD FAIRFAX	L	150488.124	0.0490
CB	13	LORD FAIRFAX	M	106172.112	0.0661
CB	14	SKYLINE	L	9075.463	0.0030
CB	15	PEANUT	H	88221.477	0.0862

CB	15	PEANUT	L	37688.450	0.0123
CB	15	PEANUT	M	12904.578	0.0080
CB	16	MOUNTAIN	H	8148.695	0.0080
CB	16	MOUNTAIN	L	313664.829	0.1020
CB	16	MOUNTAIN	M	41982.024	0.0261
CB	17	TRI-COUNTY/CITY	H	359.226	0.0004
CB	17	TRI-COUNTY/CITY	L	208421.616	0.0678
CB	17	TRI-COUNTY/CITY	M	21284.892	0.0132
CB	18	COLONIAL	H	13470.892	0.0132
CB	18	COLONIAL	L	110975.155	0.0361
CB	18	COLONIAL	M	69631.255	0.0433
CB	20	EASTERN SHORE	H	60699.838	0.0593
CB	20	EASTERN SHORE	L	1549.709	0.0005
CB	20	EASTERN SHORE	M	31955.422	0.0199
CB	21	NORTHERN VIRGINIA	L	111952.170	0.0364
CB	21	NORTHERN VIRGINIA	M	22.580	0.0000
CB	22	VIRGINIA DARE	H	6845.639	0.0067
CB	22	VIRGINIA DARE	L	47053.370	0.0153
CB	30	HANOVER-CAROLINE	H	8540.161	0.0083
CB	30	HANOVER-CAROLINE	L	203505.286	0.0662
CB	30	HANOVER-CAROLINE	M	50290.146	0.0313
CB	32	JOHN MARSHALL	H	50303.959	0.0491
CB	32	JOHN MARSHALL	L	22096.463	0.0072
CB	32	JOHN MARSHALL	M	96495.918	0.0600
CB	34	PEAKS OF OTTER	H	5705.959	0.0056
CB	34	PEAKS OF OTTER	L	22005.554	0.0072
CB	35	PRINCE WILLIAM	L	79477.286	0.0259
CB	35	PRINCE WILLIAM	M	10748.644	0.0067
CB	36	LOUDOUN	H	19004.638	0.0186
CB	36	LOUDOUN	L	31460.360	0.0102
CB	36	LOUDOUN	M	84577.698	0.0526
CB	38	MONACAN	H	664.989	0.0006
CB	38	MONACAN	L	111688.511	0.0363
CB	38	MONACAN	M	30420.003	0.0189
CB	39	PETER FRANCISCO	L	227277.102	0.0739
CB	39	PETER FRANCISCO	M	1667.245	0.0010
CB	40	HENRICOPOLIS	L	58169.684	0.0189
CB	40	HENRICOPOLIS	M	4821.080	0.0030
CB	41	HEADWATERS	H	135860.617	0.1327
CB	41	HEADWATERS	L	82201.650	0.0267
CB	41	HEADWATERS	M	42419.369	0.0264
CB	42	APPOMATTOX RIVER	L	19973.575	0.0065
CB	42	APPOMATTOX RIVER	M	4510.570	0.0028

CB	43	THREE RIVERS	H	28004.911	0.0273
CB	43	THREE RIVERS	L	75454.292	0.0245
CB	43	THREE RIVERS	M	129072.186	0.0803
CB	45	MOUNTAIN CASTLES	H	76.249	0.0001
CB	45	MOUNTAIN CASTLES	L	134685.641	0.0438
CB	45	MOUNTAIN CASTLES	M	62684.489	0.0390
OCB	3	SOUTHSIDE	L	169085.329	0.0821
OCB	3	SOUTHSIDE	M	66541.591	0.0374
OCB	5	PIEDMONT	L	42834.389	0.0208
OCB	5	PIEDMONT	M	72.155	0.0000
OCB	6	BLUE RIDGE	H	57562.051	0.0641
OCB	6	BLUE RIDGE	L	192216.197	0.0934
OCB	6	BLUE RIDGE	M	103420.329	0.0582
OCB	10	ROBERT E. LEE	H	11884.410	0.0132
OCB	10	ROBERT E. LEE	L	20842.596	0.0101
OCB	10	ROBERT E. LEE	M	106132.834	0.0597
OCB	11	NEW RIVER	H	88406.489	0.0984
OCB	11	NEW RIVER	L	47365.206	0.0230
OCB	11	NEW RIVER	M	105610.368	0.0594
OCB	12	JAMES RIVER	L	9023.604	0.0044
OCB	12	JAMES RIVER	M	28492.199	0.0160
OCB	14	SKYLINE	H	101374.485	0.1129
OCB	14	SKYLINE	L	156926.624	0.0762
OCB	14	SKYLINE	M	111284.305	0.0626
OCB	15	PEANUT	H	36731.870	0.0409
OCB	15	PEANUT	L	30830.264	0.0150
OCB	15	PEANUT	M	79078.006	0.0445
OCB	19	CHOWAN BASIN	H	111656.590	0.1243
OCB	19	CHOWAN BASIN	L	77655.459	0.0377
OCB	19	CHOWAN BASIN	M	171467.002	0.0964
OCB	20	EASTERN SHORE	H	65536.039	0.0730
OCB	20	EASTERN SHORE	L	59887.258	0.0291
OCB	20	EASTERN SHORE	M	23069.254	0.0130
OCB	22	VIRGINIA DARE	H	80292.186	0.0894
OCB	22	VIRGINIA DARE	L	18719.378	0.0091
OCB	22	VIRGINIA DARE	M	17575.027	0.0099
OCB	23	HOLSTON RIVER	H	39245.476	0.0437
OCB	23	HOLSTON RIVER	L	21896.653	0.0106
OCB	23	HOLSTON RIVER	M	85887.779	0.0483
OCB	24	DANIEL BOONE	H	66541.909	0.0741
OCB	24	DANIEL BOONE	L	19713.556	0.0096
OCB	24	DANIEL BOONE	M	27094.187	0.0152
OCB	25	CLINCH VALLEY	H	56229.439	0.0626

OCB	25	CLINCH VALLEY	L	48849.601	0.0237
OCB	25	CLINCH VALLEY	M	18406.913	0.0104
OCB	26	SCOTT COUNTY	H	74660.350	0.0831
OCB	26	SCOTT COUNTY	L	19409.042	0.0094
OCB	26	SCOTT COUNTY	M	45461.376	0.0256
OCB	27	LONESOME PINE	H	11793.261	0.0131
OCB	27	LONESOME PINE	L	168553.233	0.0819
OCB	27	LONESOME PINE	M	10967.747	0.0062
OCB	28	EVERGREEN	H	20971.538	0.0233
OCB	28	EVERGREEN	L	31883.161	0.0155
OCB	28	EVERGREEN	M	64296.771	0.0362
OCB	29	TAZEWELL	H	39278.966	0.0437
OCB	29	TAZEWELL	L	62626.124	0.0304
OCB	29	TAZEWELL	M	32753.903	0.0184
OCB	31	PITTSYLVANIA	L	100147.167	0.0486
OCB	31	PITTSYLVANIA	M	153216.187	0.0862
OCB	33	HALIFAX	L	126618.584	0.0615
OCB	33	HALIFAX	M	88305.427	0.0497
OCB	34	PEAKS OF OTTER	H	7369.581	0.0082
OCB	34	PEAKS OF OTTER	L	40118.032	0.0195
OCB	34	PEAKS OF OTTER	M	125799.142	0.0708
OCB	37	BIG WALKER	H	6847.870	0.0076
OCB	37	BIG WALKER	L	80771.842	0.0392
OCB	37	BIG WALKER	M	125610.843	0.0707
OCB	42	APPOMATTOX RIVER	L	76152.626	0.0370
OCB	42	APPOMATTOX RIVER	M	36718.199	0.0207
OCB	44	PATRICK	H	21718.052	0.0242
OCB	44	PATRICK	L	61976.703	0.0301
OCB	44	PATRICK	M	42285.863	0.0238
OCB	45	MOUNTAIN CASTLES	H	117.983	0.0001
OCB	45	MOUNTAIN CASTLES	L	10032.161	0.0049
OCB	45	MOUNTAIN CASTLES	M	19195.692	0.0108
OCB	46	LAKE COUNTRY	H	40.058	0.0000
OCB	46	LAKE COUNTRY	L	234401.524	0.1138
OCB	46	LAKE COUNTRY	M	89062.430	0.0501
OCB	47	BIG SANDY	L	130488.070	0.0634

Attachment D



Attachment E

SWCD	CB Recordation	CB WQIF	CB Total	OCB Recordation	OCB WQIF	OCB Total	Grand Total	Percent Allocation
APPOMATTOX RIVER	$8,580	$13,020	$21,600	$37,312	$50,912	$88,224	$109,824	0.57%
BIG SANDY	$0	$0	$0	$30,203	$41,210	$71,413	$71,413	0.37%
BIG WALKER	$0	$0	$0	$99,362	$135,577	$234,939	$234,939	1.21%
BLUE RIDGE	$4,660	$7,071	$11,731	$211,917	$289,155	$501,072	$512,803	2.64%
CHOWAN BASIN	$0	$0	$0	$327,117	$446,344	$773,461	$773,461	3.99%
CLINCH VALLEY	$0	$0	$0	$130,562	$178,149	$308,711	$308,711	1.59%
COLONIAL	$121,136	$183,827	$304,963	$0	$0	$0	$304,963	1.57%
CULPEPER	$497,372	$754,775	$1,252,147	$0	$0	$0	$1,252,147	6.45%
DANIEL BOONE	$0	$0	$0	$148,538	$202,676	$351,214	$351,214	1.81%
EASTERN SHORE	$182,507	$276,959	$459,466	$153,722	$209,749	$363,471	$822,937	4.24%
EVERGREEN	$0	$0	$0	$82,649	$112,773	$195,422	$195,422	1.01%
HALIFAX	$0	$0	$0	$76,651	$104,588	$181,239	$181,239	0.93%
HANOVER-CAROLINE	$112,901	$171,330	$284,231	$0	$0	$0	$284,231	1.46%
HEADWATERS	$400,979	$608,497	$1,009,476	$0	$0	$0	$1,009,476	5.20%
HENRICOPOLIS	$17,656	$26,794	$44,450	$0	$0	$0	$44,450	0.23%
HOLSTON RIVER	$0	$0	$0	$127,463	$173,920	$301,383	$301,383	1.55%
JAMES RIVER	$62,475	$94,808	$157,283	$17,365	$23,693	$41,058	$198,341	1.02%
JOHN MARSHALL	$217,772	$330,475	$548,247	$0	$0	$0	$548,247	2.83%
LAKE COUNTRY	$0	$0	$0	$102,082	$139,288	$241,370	$241,370	1.24%
LONESOME PINE	$0	$0	$0	$67,835	$92,560	$160,395	$160,395	0.83%
LORD FAIRFAX	$352,488	$534,910	$887,398	$0	$0	$0	$887,398	4.57%
LOUDOUN	$130,026	$197,317	$327,343	$0	$0	$0	$327,343	1.69%
MONACAN	$54,246	$82,319	$136,565	$0	$0	$0	$136,565	0.70%
MOUNTAIN	$129,970	$197,234	$327,204	$0	$0	$0	$327,204	1.69%
MOUNTAIN CASTLES	$86,498	$131,262	$217,760	$12,843	$17,524	$30,367	$248,127	1.28%
NATURAL BRIDGE	$238,263	$361,570	$599,833	$0	$0	$0	$599,833	3.09%
NEW RIVER	$0	$0	$0	$239,568	$326,885	$566,453	$566,453	2.92%
NORTHERN NECK	$375,622	$570,017	$945,639	$0	$0	$0	$945,639	4.87%
NORTHERN VIRGINIA	$25,820	$39,183	$65,003	$0	$0	$0	$65,003	0.34%
PATRICK	$0	$0	$0	$79,266	$108,156	$187,422	$187,422	0.97%

PEAKS OF OTTER	$19,546	$29,661	$49,207	$91,068	$124,260	$215,328	$264,535	1.36%
PEANUT	$243,854	$370,054	$613,908	$120,990	$165,087	$286,077	$899,985	4.64%
PETER FRANCISCO	$53,848	$81,716	$135,564	$0	$0	$0	$135,564	0.70%
PIEDMONT	$82,421	$125,077	$207,498	$9,953	$13,581	$23,534	$231,032	1.19%
PITTSYLVANIA	$0	$0	$0	$105,325	$143,713	$249,038	$249,038	1.28%
PRINCE WILLIAM	$27,793	$42,176	$69,969	$0	$0	$0	$69,969	0.36%
ROBERT E. LEE	$111,656	$169,441	$281,097	$84,846	$115,770	$200,616	$481,713	2.48%
SCOTT COUNTY	$0	$0	$0	$174,108	$237,566	$411,674	$411,674	2.12%
SHENANDOAH VALLEY	$445,563	$676,153	$1,121,716	$0	$0	$0	$1,121,716	5.78%
SKYLINE	$2,091	$3,174	$5,265	$293,197	$400,059	$693,256	$698,521	3.60%
SOUTHSIDE	$17	$25	$42	$74,811	$102,079	$176,890	$176,932	0.91%
TAZEWELL	$0	$0	$0	$108,468	$148,002	$256,470	$256,470	1.32%
THOMAS JEFFERSON	$269,283	$408,644	$677,927	$0	$0	$0	$677,927	3.49%
THREE RIVERS	$202,223	$306,879	$509,102	$0	$0	$0	$509,102	2.62%
TIDEWATER	$149,642	$227,086	$376,728	$0	$0	$0	$376,728	1.94%
TRI-COUNTY/CITY	$67,709	$102,751	$170,460	$0	$0	$0	$170,460	0.88%
VIRGINIA DARE	$28,209	$42,808	$71,017	$169,953	$231,897	$401,850	$472,867	2.44%
Grand Total	$4,722,826	$7,167,013	$11,889,839	$3,177,174	$4,335,173	$7,512,347	$19,402,186	100.00%