

Final West Virginia Restore Clean Water Action Items

West Virginia January 1, 2020 – December 31, 2021 Milestones - Programmatic Commitments and BMP Implementation Targets

Agriculture					
1.	12/31/2021	Conduct one promotional outreach session with Berkeley County Farmland Protection easement holders on the various benefits of eligible Conservation Programs, such as CREP, EQIP, and WV Agricultural Enhancement. (WIP-3, pg. 8)	2 year milestone annual report	Region 9 Planning and Development Council – Pennington	Due to COVID regulations, the original project dinner was canceled. Direct Mailings that contain brochures and flyers detailing the many conservation services in the Eastern Panhandle are being sent to Farmland Protection easement holders in Berkeley, Jefferson, and Morgan Counties. These mailers, which include a contact request card, may open a communication conduit with those interested, and how best to promote CREP on a case-by-case basis. The mailings were sent out on December 6, 2021.
2.	12/31/2021	Conserve 7500 acres of agriculture land under the WV Farmland Preservation Program and County Farmland Protection Boards. (WIP-3 pg. 10, 61, 62)	7500 acres conserved land	County Farmland Protection Boards – Mark Schiavone	5533.785 acres conserved
3.	12/31/20 12/31/21	Engage water utilities, land trusts, and community partners in using land conservation to protect drinking water through the Safe Water Conservation Collaborative. (pg. 61-62)	2 year milestone annual report	WV Rivers Coalition – Tanner Haid	In accordance with local Source Water Protection Plans, Collaborative partners in 2020-2021 created seven landowner legacy videos, generated three local and regional media stories, and conducted outreach through multiple postcards to 750 landowners within drinking water protection areas. These actions resulted

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					in securing 7 easements totaling just under 500 acres. We administered a riparian buffer project at Gap View Farm in Jefferson County; which resulted in the planting of 900 trees, and was highlighted in 4 media stories.
4.	12/31/2020 12/31/2021	Maintain cover crop implementation of a minimum of 7,000 acres annually within the Potomac Valley and Eastern Panhandle Conservation Districts by providing incentives to plant additional acreage and boost early cover crop adoption. (pg. 39, 42, 45, 46, 79)	7000 acres cover crop	WVCA – Shreve	<p>A total of 6,685.03 acres of cover crops were planted in the fall of <u>2020</u>. Those acres can be broken down as follows: EPCD 4,661.34 acres, PVCD 2,023.69 acres.</p> <p>A total of 6,499.05 acres of cover crops were planted in the fall of <u>2021</u>. Those acres can be broken down as follows: EPCD 4,780.72 acres, PVCD 1,718.33 acres.</p>
5.	12/31/2020 12/31/2021	Update WV based outreach materials that can be utilized to showcase resource concerns and how BMP implementation has advanced water quality. (pg.50-58)	2 year milestone annual report	WVDA/WVCA – Monroe/Shreve	<p>2020 - Due to the current pandemic, displays have not been utilized for outreach. However, the WV CBay website has been updated regularly and educational posts have been made on the WV CBay Facebook page. Cover crop signs were also designed and distributed. (Materials are attached.)</p> <p>2021 – The WV CBay website has continued to be updated regularly and educational posts have also been made on the WV CBay Facebook page. Additionally, WVCA and PVCD created and distributed approximately 1,200 copies of a Chesapeake Bay Activity</p>

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					Book (PDF provided) and also provided braille signage for an already installed rain garden at the WV School for the Deaf and Blind (pictures provided).
6.	12/31/2020 12/31/2021	Continue to develop a series of WV Chesapeake Bay videos promoting BMP adoption (i.e. Cover Crop, Stream Restoration, CREP, Verification). (pg. 50-58)	2 year milestone annual report	WVDA/WVCA/ NRCS/FSA/ WVDOF/TU – Monroe / Shreve	2020 - Currently, WVCA is developing videos to promote planting of cover crops and CREP. A video of the stream restoration on Sleepy Creek is also being developed. 2021- WVCA created and promoted a video that highlighted the Sleepy Creek stream restoration. It can be found at Sleepy Creek Video Final January 2021 - YouTube . A CREP promotional video has been created and is awaiting final approval before release. Once approved, it will be promoted on the WVCA website and social media.
7.	12/31/2020 12/31/2021	Implement a formal riparian buffer outreach strategy to increase the adoption of effective buffers to 200 new acres annually. This will be in conjunction with our federal, state and local partners and may include mass mailings, public meetings, news article series, videos, field days, etc. that promote both riparian buffers in general and CREP. (pg. 50-54)	200 new acres forested buffers	WVDA/WVCA/ NRCS/FSA/ WVDOF/TU – Monroe / Shreve	2020 - WVCA is currently working with WVDOF and FSA to create and/or print outreach materials. These materials include a guide for landowners for successful riparian buffers and a brochure that will be mailed to prospective landowners. (Materials are attached.) 2021- Materials were printed and distribution has begun. Because WV FSA is severely understaffed, mailing lists have not been obtained. However, WV DOF has been sharing the guide for landowners.

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8.	12/31/2021	Host a comprehensive programmatic and technical CREP training with classroom and field components for all CREP partners. This will address new staff, consistency in program delivery, program compliance, and monitoring and maintenance issues. (pg. 50)	2 year milestone annual report	FSA/WVDOF/ WVCA/NRCS – Monroe / Shreve	2020- A two-day in-person training was scheduled for March. However, due to the pandemic, it was cancelled. Partners were determined to hold a training to fulfill the commitment. A one-day virtual training was held in September 2020. There were 75+ attendees and the training was recorded and posted online for future training purposes. http://www.wvchesapeakebay.us/CREP/ 2021- complete
9.	12/31/2021	WV CREP Partner Agencies, led by WVCA, will train staff and implement a verification program for CP22 contracts. A combined effort between state and federal partners will result in inspection of 100% of expiring contracts annually. (pg. 50)	Retain 50% of credited acres	WVDA/WVCA/W DOF/NRCS/ FSA – Monroe/Shreve	2020- Development of a formal training for additional staff was put on hold due to the pandemic. However, WVDOF and NRCS were successful in the inspection of expiring contracts. 2021- Due to the pandemic and also lack of staff at the state and local FSA levels, training for such a program was impossible.
10.	12/31/2020 12/31/2021	Implement an agriculture BMP verification program using an adaptive management approach. (Pg. 60-61)	2 year milestone annual report	WVDA/WVCA/ WVDOF – Monroe/Shreve	Initial tests were conducted using current agricultural BMP data. During this test, WV Division of Forestry BMP data was exported from WVDA’s Agricultural BMP Database for analysis in ARC GIS Pro. Initial results appear promising, so further research will be conducted over the remainder of the calendar year to improve data capture and utilization. Improvements in data

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					utilization will open up opportunities to quickly ramp up West Virginia's Agriculture BMP Verification Program.
11.	12/31/2020 12/31/2021	Transfer a minimum of 7,500 tons of wet litter from Potomac Valley Conservation District annually. This will be accomplished by offering incentive payments to Eastern Panhandle Conservation District and Tygarts Valley Conservation District cooperators for the purchase of poultry litter from the Potomac Valley Conservation District area. (pg. 39, 40, 79, 80)	7500 wet tons poultry litter reported	WVCA - Shreve	2020- 4,879.34 tons of wet poultry litter were moved out of PVCD. 2021- 3,927.3 tons of wet poultry litter were moved out of PVCD. There is a consistent downward trend of litter that is available for transfer due to change in management. Currently, the majority of poultry producers within the PVCD region are utilizing built-up litter which should be further investigated as a litter storage system.
12.	12/31/2021	Construct animal waste storage facilities on new poultry operations for a minimum of 5,000 animal units. (pg. 39, 42, 44, 79)	animal waste storage for 5000 new au.	NRCS - Shreve	2020- Mineral County – 287.76 Hardy County – 2,828.63 Grant County - 297.87 TOTAL – 3,414.26 au 2021- Hampshire County – 56 Hardy County – 1,141.79 TOTAL – 1,197.79
13.	12/31/2020	In consultation with NRCS, assess operational status of expiring poultry animal waste storage structures built between 2004 and 2006. Existing and functioning BMPs will be reported through NEIEN.	Retain 65% of credited au.	WVCA - Shreve	Expiring contracts were examined and following consultation with NRCS and WVDA staff, were deemed either fully functioning or no longer in use. 81.8% were retained and reported through NEIEN.
14.	12/31/2021	Host a state-wide field day at the 2019 WV Conservation Farm located in Mineral County. Current conservation practices will be show	2 year milestone annual report	WVDA/WVCA/ NRCS/FSA/	2020- Due to the pandemic, the planned field day was postponed. Agencies as well as the producers are hopeful that

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		cased and staff will be available to advise attendees of available incentive programs. (pg. 46)		WVDOF/TU - Shreve	2021 will provide opportunities to showcase and educate the public about conservation efforts. 2021- Due to current pandemic conditions, a large field day was not held. However, EPCD did host a grazing workshop in September that had approximately 28 individuals in attendance.
15.	12/31/2020 12/31/2021	All EQIP and CREP contracts will include an up-to-date conservation plan. Depending upon the specific operation, a prescribed grazing plan may also be included. Acres under these plans will be updated annually. (pg. 62)	Conservation and grazing plan acres reported through NEIEN.	NRCS/FSA/WVCA - Shreve	Correspondence with local NRCS staff verified that conservation planning is included in EQIP and CREP contracts. A portion of these acres translated into prescribed grazing acres for NEIEN inclusion. These were acres that were previously left unaccounted for.
Wastewater					
16.	12/31/2020 12/31/2021	Input compliance schedules and orders into EPA's Integrated Compliance Information System. (pg. 12-17)	Data in system	WV DEP – Patel, Bandy, Wright	As of 12/31/2021, all data has been entered into ICIS.
17.	12/31/2020 12/31/2021	Update inventory of WWTPs with upgrades and schedules as needed. (pg. 12-17)	Spreadsheet	WV DEP - Wandling	Updated spreadsheet attached.
18.	12/31/2020 12/31/2021	Review compliance of newly upgraded systems with NPDES permit limits. (pg. 12-17)	2 year milestone annual report	WV DEP – Wandling	Significant facilities were reviewed quarterly by WVDEP Program Support staff. In 2020, the US Dept. of Interior's Leetown Science Center (permit number

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					WV0005649) exceeded the yearly TN and TP limits for outlets 002 and 003. WVDEP has been corresponding with them on the exceedances. In 2021, the US Dept. of Interior's Leetown Science Center's loads are better than in the previous year, but they still exceeded their yearly TN limits for Outlets 002 and 003. WVDEP EE is conducting a comprehensive inspection of the facility to address the facilities noncompliance.
19.	12/31/2020 12/31/2021	Assist the Warm Springs Public Service District develop and apply for funding to conduct an inflow and infiltration management project. (pg. 19)	2 year milestone annual report	Region 9 Planning and Development Council	Funding has been secured with the USDA Rural Utilities Services Water and Wastewater Loan/Grant Program. Currently in the design phase.
20.	12/31/2020 12/31/2021	Report new septic installations and connections to Publicly Owned Treatment Works (POTWs) in annual progress submissions to demonstrate overall minimal growth on septic systems.	Annual progress (connections to POTWs) & spreadsheet (new septics)	WVDEP - Hartman	Complete: New septics emailed to J.Sweeney & P.Claggett on 12/2/20 and 11/30/21. Number of connections added to progress XML submittal 11/25/20 and 12/1/21.
Offsets and Trading					
21.	12/31/2020 12/31/2021	Update and maintain offsets tracking and accountability system in accordance with EPA requirements. (pg. 12-17)	spreadsheet	WV DEP - Patel	Complete. Spreadsheet included.
22.	12/31/2020 12/31/2021	Consider and, if appropriate, approve, offset requests on a case by case basis. (pg. 12-17)	2 year milestone annual report	WV DEP - Patel	5 offsets approved in 2020. No additional offsets in 2021.

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Urban Stormwater					
23.	12/31/2020 12/31/2021	Obtain funding and develop one (1) Multi-Jurisdictional Hazard Mitigation Plan containing goals and strategies for Nature Based BMPs co-benefitting Water Quality and Hazard Mitigation. (pg. 31)	2 year milestone annual report	Region 9 Planning and Development Council - Pennington	Complete – Awaiting FEMA comments as of 12/01/2021.
24.	12/31/2020	Coordinate a workshop on stormwater management topics with partners, e.g. CSN, Region 9. (pg. 26)	2 year milestone annual report	WV DEP - Hartman	Held 1/12/2021 in cooperation with Chesapeake Stormwater Network with 17 attendees.
25.	12/31/2020	Update the WV Stormwater Management and Design Guidance Manual to incorporate the latest CBP approved BMPs. Add summary chapter with how-to and resource guides for municipalities, contractors, subdivisions, and homeowners. Provide details on incorporating (poultry litter) biochar as soil amendment and in BMPs. (pg. 23)	Stormwater Guidance Manual	WV DEP - Donner	Review determined that the manual is still current and no updates are proposed at this time. Position has been vacant since August 2020 and the summary chapter and bio char additions have not yet been added.
26.	12/31/2020	Analyze current land use data to determine impact on nutrient and sediment loads. (pg. 10, 20-23, 27)	2 year milestone annual report	WV DEP - Donner	Complete. Analyzed the CAST 2019 acre and load quantities and distributions.
27.	12/31/2021	Hold workshop on using the updated WV Stormwater Management and Design Guidance Manual. (pg. 23, 26)	2 year milestone annual report	WV DEP - Donner	Held virtual workshop 12/8/2020 with 28 attendees.
28.	12/31/2021	Fulfill training requests by MS4s and stormwater professionals. (pg. 28)	2 year milestone annual report	WV DEP - Donner	Complete. Provided additional resources to Berkeley County and Martinsburg MS4s
29.	12/31/2021	Shift BMP verification and inspection of new BMPs to same progress year as construction. (pg. 22)	NEIEN submittal	WV DEP - Donner	Complete. Inspections for the BMPs being submitted end of 2020 and 2021 were

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					inspected prior to June 30 th 2020 and 2021 respectively.
30.	12/31/2021	Update QAPP to reflect the milestone above. (pg. 28)	QAPP	WV DEP - Donner	Complete. Now using Notices of Termination for construction projects to inspect BMPs during the program year of implementation.
31.	12/31/2021	Reissue the Municipal Separate Storm Sewer Systems Permit.	2 year milestone annual report	WV DEP – Patel	Permit extended through 2/11/2022.
32.	12/31/2021	Using EPA/Tetra Tech contract, design green infrastructure project for the City of Martinsburg. (pg. 28, 34, 36)	2 year annual milestone report.	WV DEP – Koon via Tetra Tech	Design is complete.
WEST VIRGINIA NOTES AND GENERAL COMMENTS					
	None				

Significant Facilities Upgrade Status 1/1/2021-12/31/2021

WV/NPDES	Permittee	Upgrade "Substantially Complete" Status/Schedule Date	Comment
WV0106038	MOOREFIELD-HARDY COUNTY WASTEWATER AUTHORITY	complete	consolidates and treats previous Town of Moorefield WV0020150 and two significant industrial facilities
WV0020699	ROMNEY	complete	
WV0021792	PETERSBURG	complete	
WV0022349	CHARLES TOWN	complete	Charles Town Willow Springs wastewater treatment plant (WV0086452) tied into Charles Town (WV0022349) Outlet 001 6/14/2017.
WV0023167	MARTINSBURG	complete	
WV0024392	KEYSER	complete	
WV0024775	SHEPHERDSTOWN	complete	
WV0027707	WARM SPRINGS PSD - BS	compliant at 2021 progress	no near term upgrade planned
WV0105988	FRANKFORT PSD	complete	previously Fort Ashby WV0041521
WV0082759	BCPSSD - O/H	complete	
WV0082759	BCPSSD - Inwood	complete	
WV0082759	BCPSSD - Baker Heights	complete	
WV0082759	BCPSSD - North End	complete	
WV0005495	PILGRIM'S PRIDE CORPORATION	complete	Included in Moorefield-Hardy County Wastewater Authority
WV0047236	PILGRIM'S PRIDE CORPORATION	complete	Included in Moorefield-Hardy County Wastewater Authority
WV0005649	USDOI - Leetown	noncompliant at 2021 progress	no near term upgrade planned
WV0111821	WVDNR - Reeds Creek	compliant at 2021 progress	no near term upgrade planned
WV0112500	WVDNR- Spring Run	compliant at 2021 progress	no near term upgrade planned
WV0116149	CONSERVATION FUND	compliant at 2021 progress	no near term upgrade planned

WV Trading/Offset Tracking List

Trade / Offset	Trade/Offset Destination						Trade/Offset Source							Comments
	Permit ID	Facility Name	Outlet ID	EOS TN Loading Acquired (lbs/yr)	EOS TP Loading Acquired (lbs/yr)	Date Acquired	Permit ID	Facility Name	Outlet ID	EOS TN Loading (lbs/yr)	EOS TP Loading (lbs/yr)	EOS %TN Load Remaining	EOS %TP Load Remaining	
1.	WV0084361	Jefferson County PSD	001	5000	500	03/17/11	NA	Red Barn, in-PA	NA	5000	500	0.0%	0.0%	Facility not constructed, remaining a collection system.
2.	WV0105988	Frankfort PSD	001	19706	2723	01/01/11	WV0041521	Forth Ashby PSD	001	7610	761	0.0%	0.0%	Lakewood/Frankfort different delivery factors for nitrogen (not a lb = lb offset)
						WVG550200	Graceland Homeowners Association	001	1140	190	0.0%	0.0%		
						WVG550507	Hunt Club Subdivision	001	658	110	0.0%	0.0%		
						WV0088897	Knobley Estates Sanitary Corporation	001	3288	548	0.0%	0.0%		
						WVG550775	Lakewood Enterprises Inc.	001	2712	452	0.0%	0.0%		
						WVG551363	Moreland's Mobile Home Park	001	1151	192	0.0%	0.0%		
						WVG550273	Sherwood Acres Subdivision	001	1178	196	0.0%	0.0%		
						WVG551018	Mineral County BOE	001	548	91	0.0%	0.0%		
						WVG551060	Mineral County BOE	001	1096	183	0.0%	0.0%		
3.	WV0106038	Moorefield-Hardy County WW Authority	001	51410	5219	10/07/11	WV0005495	Pilgrim's Pride (Kill Plant)	001	33490	3350	0.0%	0.0%	
						WV0047236	Pilgrim's Pride Pilgrim's Pride (Cook Plant)	105	7610	760	0.0%	0.0%		
						WV0020150	Town of Moorefield	001	9132	913	0.0%	0.0%		
						WVG550723	Caledonia Heights	001	1178	196	0.0%	0.0%		
4.	WV0103161	Berkeley County PSSD (Woods II)	001	470	132	04/30/13	WVG550581	Berkeley County PSSD (Woods Resort)	001	789	132	0.0%	0.0%	Different delivery factors for each facility for nitrogen (not a lb = lb offset)
5.	WV0105988	Frankfort PSD	001	4950	870	08/19/14	WVG550462	Mountaineer Village Utilities	001	1644	274	0.0%	0.0%	Mountaineer/Frankfort different delivery factors for nitrogen (not a lb = lb offset)
						WVG550915	Pownall's Addition Comm. Association	001	2356	393	0.0%	0.0%		
						WVG551148	Green Gables Limited Partnership	001	687	192	0.0%	0.0%		
						WVG550817	Short Gap Volunteer Fire Dept.	001	66	11	0.0%	0.0%		
6.	WV0082759	Berkeley County PSSD	004/008	4566	456	09/16/14	WV0082759	Berkeley County PSSD	001/005	4566	456	0.0%	0.0%	0.3 MGD being transferred from 001/005 to 004/008.
7.	WV0105953	Berkeley Springs Development, LLC	001	3044	304.4	02/11/10	WV0081337	Coolfont	001	3069	511	0.0%	0.0%	Full load aquired from Coolfont. Remaining load of 25 TN and 207 TP with BCDev.
8.	WV1018027	Mettiki Coal	402	17.3 Delivered	NA	06/01/15	WVG550793	Grant County Development Authority	001	820	137	33.0%	33.0%	Different delivery factors for each facility for TN and TP (not a lb = lb offset). Grant Cnty permit transferred 0.01 MGD of flow to the Mettiki facility which reduced the design flow of the Grant Cnty permit from 0.015 MGD to 0.005 MGD. The Mettiki permit has limits imposed in terms of TN Delivered (TP converted to TN).
9.	WV0022349	City of Charles Town	003	5479	913	06/01/17	WV0086452	Willow Springs PSC	001	5479	913	0.0%	0.0%	Willow Springs PSC's permit/discharge terminated, tied into Charles Town.
10.	WV0116980	WVDNR - Petersburg Hatchery	001	7456	913.2	07/05/18	WV0105821	Huntfield LLC	001	5479.4	913.2	67.0%	0.0%	Different delivery factors for nitrogen (not a lb = lb offset)
11.	WV0105856	PNGI Charles Town Gaming, LLC	001/002	1492	149	05/07/18	NA	PNGI Charles Town Gaming, LLC	NA	1102	345	0.0%	0.0%	Modeling effort between WVDEP and EPA which modeled the effect of the removal of a minimum of 3,400 tons/yr of horse manure from PNGI by being transported out of the Chesapeake Bay watershed. 3,400 tons of manure was equated to being the EOS TN/TP values entered for the Trade/Offset Source. Different delivery factors were used in the full assessment which is not reflected here.
12.	WV0005649	US Dept. of Interior - Leetown Science Cent.	002/003	420	70	08/14/18	WV0005649	US Dept. of Interior - Leetown Science Cent.	001	18273	1827	97.7%	96.2%	Two other small discharges at site being added to permit. Pulling from existing load.
13.	WV0117293	WVDNR - Ridge Hatchery	001-007	4067	470.1	08/20/18	WV0105155	Alex Rahmi - Uniwest	001	4109.5	684.9	48.1%	31.4%	Different delivery factors for nitrogen (not a lb = lb offset)
14.	WV0082759	Berkeley County PSSD	004	6883	1122	04/08/20	WV0105708	BCPSSD - Pandhandle Homes	001	2740	457	0.0%	0.0%	Different delivery factors for nitrogen and phosphorus (not a lb = lb offset)
						WV0105791	BCPSSD - Riverside	001	2740	457	0.0%	0.0%		
						WVG550778	BCPSSD - Broad Lane	001	1479	247	0.0%	0.0%		
15.	WV0106259	Town of Capon Bridge	001	4012	684	10/23/20	WVG551350	Town of Capon Bridge	001	2734	456	0.0%	0.0%	Different delivery factors for nitrogen (not a lb = lb offset). The existing WVG551350 discharge is being upgraded from 0.05MGD to 0.075MGD. Flow is being limited to 0.0734MGD to hold the TN load equal.
						WVG551283	Hampshire Cnty Dev. Authority-Tech Park	001	1367	228	0.0%	0.0%		