Elevation Sources for WV Flood Tool											
#	1	2A	2B	3A	3B	4A	4B	5A	5B	5C	6
WV Project Name	**2012 FEMA R3 WV-VA-MD (Jefferson, Berkeley, Morgan)**	**2016 FEMA R3 WV East**	**2016 FEMA R3 WV-East Elk-River-AOI**	**2016-17 FEMA R3 WV Northeast**	**2016-17 FEMA R3 VA Southwest**	**2017 FEMA Mercer County**	**2018 FEMA WV West**	**2018-19 FEMA Tucker-Randolph Counties**	**2018-19 FEMA Wirt-Roane Counties**	**2018-19 FEMA Mason-Putnam Counties**	**2018 FEMA South Central WV Lidar**
Source	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA
Year	2012	2016	2016	2016-17	2016-17	2017	2018	2018-19	2018-19	2018-19	2018-20
Quality Level	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Grid Resolution	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**	**1m**
Horizontal Accuracy	1 m	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided	Not Provided
Vertical Accuracy	10 cm RMSEz	6.7 cm	6.7 cm	6.22 cm	6.22 cm	12.7 cm	12.9 cm	10 cm (spec)	10 cm (spec)	10 cm (spec)	10 cm (spec)
Coordinate Sytem	UTM Zone 17 & 18	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17	UTM Zone 17
Horizontal Datum	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83	NAD83
Vertical Datum	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88	NAVD88
Z-Units	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters	Meters
Source DataType	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo	Lidar-Topo
Restrictions	Public	Public	Public	Public	Public	Public	Public	Public	Public	Public	Public
Products Available	Points, bare earth, breaklines, DEM	DEM, point cloud, contours, breaklines	DEM, point cloud, contours, breaklines	DEMs, point cloud, contours, breaklines	DEMs, point cloud	Bare Earth DEMs, point cloud, contours, breaklines	Bare Earth DEMs, point cloud, contours, breaklines	Bare Earth DEMs, point cloud, contours, breaklines	Bare Earth DEMs, point cloud, contours, breaklines	Bare Earth DEMs, point cloud, contours, breaklines	Bare Earth DEMs, point cloud, contours, breaklines
Point Spacing	0.5 m	0.64 m	0.64 m	0.7 m (spec)	0.7 m (spec)	.71m	.71m	0.7 m (spec)	0.7 m (spec)	0.7 m (spec)	0.71 m
Vertical RMSE	10	6.7	6.7	10	10	12.7	12.9	10	10	10	10
InvID	4114	8265	8265	9282	9282	9161	9161	9282	9282	9282	9496
Meets 3DEP	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reasons 3DEP	Missing USGS Base Spec products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products	QL2 or better quality lidar data with USGS Base Spec v1.2 products
Prime Contractor	Dewberry	Quantum Spatial	Quantum Spatial	Dewberry	Dewberry	Dewberry	Dewberry	Dewberry	Dewberry	Dewberry	Dewberry
FEMA Project Name	VA-WV-MD_FEMA-LIDAR-R3 Lot4_2012	2016 FEMA R3 WV East	2016 FEMA R3 WV East	2016 VA FEMA R3 Southwest Lidar	2016 VA FEMA R3 Southwest Lidar	2017_NRCS_FEMA_South_Central_VA_WV_Lidar	2017_NRCS_FEMA_South_Central_VA_WV_Lidar	2018 FEMA HQ WV LiDAR	2018 FEMA HQ WV LiDAR	2018 FEMA HQ WV LiDAR	FEMA_2018-20_SouthCentral_WV_UTM17

#	1	2A	2B	3A	3B	4A	4B	5A	5B	5C	6
WV Project Name	**2012 FEMA R3 WV-VA-MD (Jefferson, Berkeley, Morgan)**	**2016 FEMA R3 WV East**	**2016 FEMA R3 WV-East Elk-River-AOI**	**2016-17 FEMA R3 WV Northeast**	**2016-17 FEMA R3 VA Southwest**	**2017 FEMA Mercer County**	**2018 FEMA WV West**	**FEMA 2018-19 Tucker-Randolph Counties**	**FEMA 2018-19 Wirt-Roane Counties**	**FEMA 2018-19 Mason-Putnam Counties**	**2018 FEMA South Central WV Lidar**
Source	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA	FEMA
Year	2012	2016	2016	2016-17	2016-17	2017	2018	2018-19	2018-19	2018-19	2018-20
Start Date	01/29/12	11/22/16	11/22/16	11/04/16	11/04/16	12/4/2017	04/11/2018	11/8/2018	11/8/2018	11/8/2018	12/7/2018
End Date	04/26/12	12/28/16	12/28/16	04/27/17	04/27/17	12/6/2017	05/24/2018	5/5/2019	5/5/2019	5/5/2019	3/4/2020
Tile Extent	1,500m x 1,500m	1,500m x 1,500m	1,500m x 1,500m	1,500m x 1,500m	1,500m x 1,500m	1,500m x 1,500m	1,500m x 1,500m	1,000m x 1,000m	1,000m x 1,000m	1,000m x 1,000m	1,500m x 1,500m
# Tiles	1,023 (29.8GB)	4133 (300GB)	187 (13GB)	3,242 (579GB)	74 (8.70GB)	538 (4.69GB)	1,535 (13.4GB)	5,115 (24.8GB)	2,270 (11GB)	1,760 (8.48GB)	16,198 (142 GB)
DEM/LAS Download	TNM	TNM	TNM	TNM	TNM	WVGISTC	WVGISTC	WVGISTC	WVGISTC	WVGISTC	WVGISTC
Notes	Covered by multiple projects in The National Map: VA-WV-MD_FEMA_REGION3_UTM18_2012, VA-WV-MD_FEMA_REGION3_UTM17_2012, and VA_LOUDOUNCO_2012	FEMA R3 GPSC	FEMA R3 GPSC	USGS GPSC	USGS GPSC	USGS GPSC	USGS GPSC	USGS GPSC	USGS GPSC	USGS GPSC	OL2

Notes:

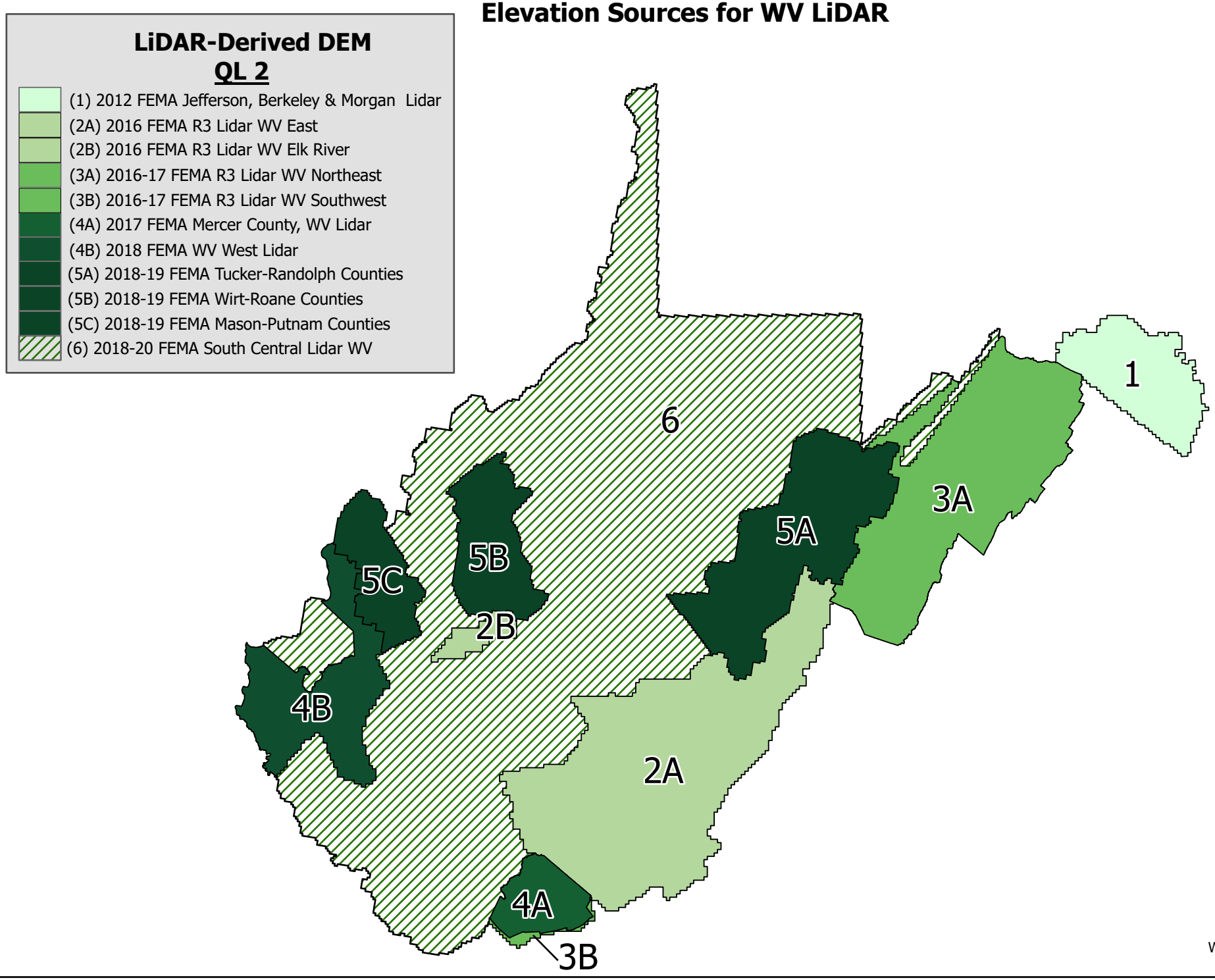
(1) All the datums for the ground elevation data are NAVD 88 (vertical) and NAD83 (horizontal)

(2) The WVDEP fused the different elevation sources into a 3-meter resolution elevation grid for Coal Fields project.

(3) Elevation source information compiled from the NOAA U.S. Interagency Elevation Inventory (https://coast.noaa.gov/inventory/) and project metadata.

(4) Lidar tiles and derived products can be downloaded from USGS' The National Map (https://viewer.nationalmap.gov/basic/) and the WV LiDAR LAS File Download Tool (http://data.wvgis.wvu.edu/elevation/).

Elevation Sources for WV LiDAR



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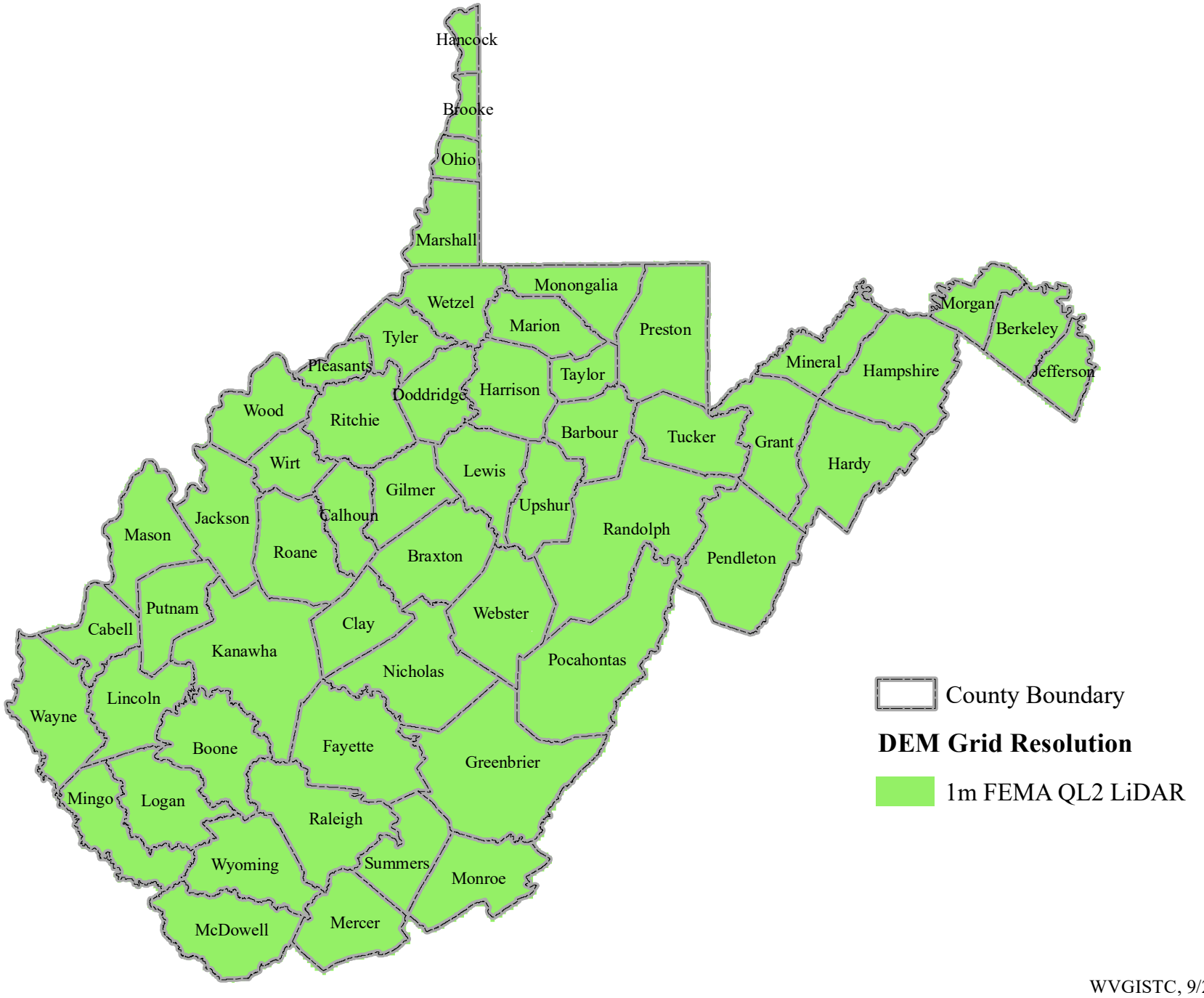
DEM Grid Resolution



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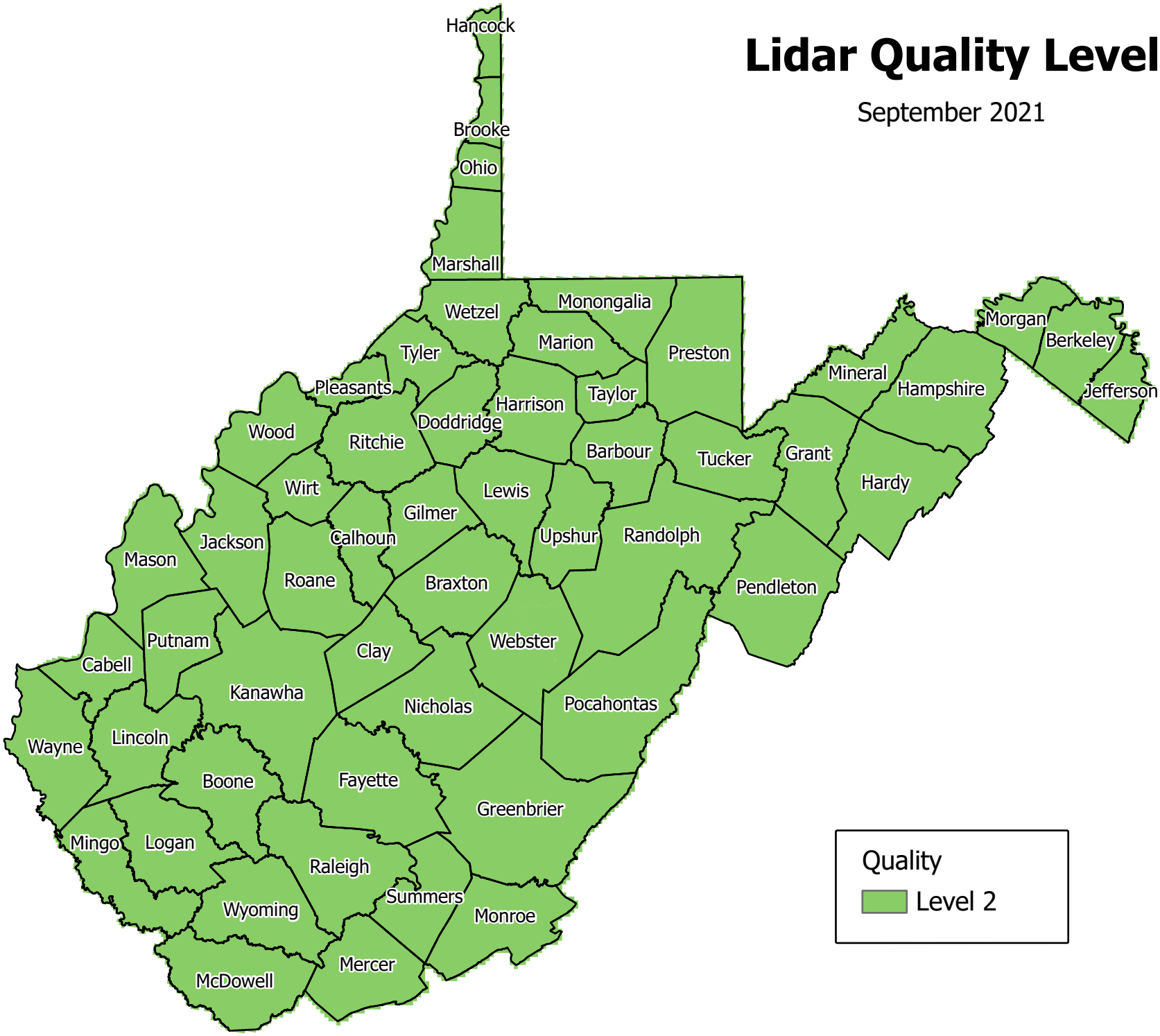
Lidar Quality Level

September 2021



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