2.7 WILDFIRE

A wildfire is an uncontrolled fire that burns an area of combustible vegetation and typically occurs in rural areas. Each year in Ohio, an average of 450 wildfires burn 1500 acres of forest and grassland within ODNR Division of Forestry's Wildfire Protection Area (Map 2.7.a). The protection area includes all 200,000+ acres of Ohio's 24 State Forests, as well as all privately owned lands within the district boundaries. The forest fire protection district corresponds mostly to the state's unglaciated hill country (southern and eastern Ohio), and also encompasses a section of northwest Ohio (Maumee State Forest area). According to the Ohio Department of Natural Resources, Ohio's wildfire seasons occur primarily in the spring (March, April and May) before vegetation has "greened-up", and the fall (October and November) when leaf drop occurs. During these times and especially when weather conditions are warm, windy and with low humidity, cured vegetation is particularly susceptible to burning. Fuel (vegetation, woody debris), weather (wind, temperature, humidity) and topography (hills and valleys) when combined present an unpredictable danger to unwary civilians and firefighters in the path of a wildfire. Open burning is regulated by state laws and local burning ordinances, which may vary from one jurisdiction to another. Outside municipal limits, burning is prohibited from 6 am to 6 pm during the months of March, April, May, October and November. It is during these times of the year and day that wildfires are most likely to occur and are the most difficult to control.

While Ohio government agencies and local fire departments are accustomed to handling seasonal wildfires, occasional extreme events can make conditions dangerous and disruptive. Heavy fuel accumulations oftentimes make wildfire suppression extremely difficult due to more intense blazes. Occasionally, heavy fuel loadings and topography create problems in limiting access to fires, and lead to heavy equipment use for suppression. Prolonged drought may cause an exceptionally long or active wildfire season, as well as contribute to extreme wildfire behavior or burning conditions. Multiple concurrent fires can tax resources and quickly create a lack of manpower and other resources and retard the ability to suppress fires rapidly and safely.

The Wildland Urban Interface (WUI) conditions may create a serious issue of concern in Ohio. The WUI is defined as the situation where homes, residences, and structures are in close proximity to forested lands and grasslands prone to wildfire. This creates a situation where, in the event of a wildfire, personal and property safety are put in jeopardy. Additionally, WUI situations force fire departments to shift focus from fire suppression to structure protection, consequently increasing exposure time and risk. WUI situations are most effectively addressed prior to wildfire occurrence by individual homeowners. Mitigation strategies include reducing flammable vegetation and debris within 30 feet of the structure, choosing less flammable landscape species, using fire resistant building materials, and practicing safe open burning techniques. Currently in Ohio, there are numerous codes in place that regulate buildings and fire safety. The Ohio Fire Code 1301: 7-7 establishes regulations affecting or relating to structures, processes, premises and safeguards regarding:

1. The hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices.
2. Conditions hazardous to life, property or public welfare in the occupancy of structures or premises.
3. Fire hazards in the structure or on the premises from occupancy or operation.

4. Matters related to the construction, extension, repair, alteration or removal of fire protection systems.
5. Conditions affecting the safety of fire fighters and emergency responders during emergency operations.

Because nearly all wildfire occurrences in Ohio are human caused, wildfire prevention through community outreach, education, and local fire department cooperation are critical to decreasing wildfire occurrence and minimizing damage. When local fire departments take the lead on community safety, chances for success are greater because of the leadership and trust that local responders have with community members. The ODNR Division of Forestry supports local fire departments by providing educational materials, brochures, and wildfire prevention handouts for events. The Division of Forestry also supports local Fire Departments by providing wildfire suppression training, grant opportunities, and other capacity-building programs.

Open burning (burning of yard waste or debris) is regulated by state laws and local burning ordinances, which may vary from one jurisdiction to another. ORC addresses kindled fires regulations, and states that outside municipal limits, open burning is prohibited from 6 am to 6 pm during the months of March, April, May, October and November. It is during these times of the year and days that wildfires are most likely to occur and are the most difficult to control. Additionally, the Ohio EPA enforces OAC 3745.19, which regulates materials that may or may not be incinerated through open burning. Prohibited substances include petroleum-based materials, food waste, and animal carcasses. To ensure compliance with all regulations, residents should contact their local fire official with jurisdiction for the applicable laws.

RISK ASSESSMENT

LOCATION

Wildfires in Ohio occur most frequently in the southern, southeastern, and eastern parts of the state. This area is predominantly unglaciated, hilly country, and varies in land cover type, including abundant forests and grasslands. The ODNR Division of Forestry is responsible for wildland fire protection on all state and private lands within this area. Additionally, ODNR Division of Forestry has wildfire protection responsibility in a disjoined area in northwest Ohio surrounding Maumee State Forest. Local and volunteer fire departments across these parts of Ohio typically provide initial response wildfire suppression service within their respective jurisdictions. Following response to a wildfire event, local fire departments within the ODNR Division of Forestry wildfire protection area are encouraged to file a wildfire report to ODNR Division of Forestry. Wildfire reports contain information such as date, time, location, size, etc. Filing wildfire reports to ODNR Division of Forestry is not mandatory, but is highly encouraged.

On February 9, 2019, the Ohio Department of Natural Resources announced the expansion of the ODNR Division of Forestry's Forest Fire Protection Area. This new boundary now includes the entirety of Ashland, Columbiana, Fulton, Henry, Highland, Holmes, Knox, Licking, Lucas, Richland, Fairfield, Ross, and Stark Counties whereas in the previously they were each only partially within the area. In addition, entire counties are wholly incorporated including: Ashtabula, Brown, Clermont, Geauga, Mahoning, Portage, and Trumbull Counties whereas before they were entirely outside of the boundary.

Map 2.7a

ODNR Division of Forestry's Expanded Forest Fire Protection Area

The ODNR Division of Forestry does not collect wildfire occurrence data from outside the ODNR Forestry protection area. Parts of Ohio that are outside of the protection area experience occasional wildfire events, but due to land use and land cover type (agricultural, developed urban/suburban) are generally of lower wildfire risk and occurrence. However certain parts of western Ohio have scattered Conservation Reserve Program (CRP) grasslands, which are a very volatile wildland fire fuel type. Since fire departments outside of the ODNR Forestry wildfire protection area do not file wildfire reports within the ODNR database, ODNR Division of Forestry does not have a dataset for wildfire occurrence in these areas.

For the remaining parts of the state outside of the ODNR wildfire protection area, data obtained from the National Fire Incident Reporting System (NFIRS), established by the US Fire Administration, will be used for the purpose of research in this part of the plan. Per their website, NFIRS is a reporting standard that fire departments use to uniformly report on the full range of their activities. It is the largest national database of fire incident information and claims to comprise of about 75% of all reported fires that occur annually. For Ohio, the data is maintained and compiled by the Ohio Department of Commerce Division of State Fire Marshal and reports the compiled data to the US Fire Administration.

Region 1: ODNR Division of Forestry collects wildfire data from fire departments in Lucas, Henry, and Fulton counties in Region 1, as these counties contain parts of Maumee State Forest. ODNR Division of Forestry does not collect wildfire report data in the remainder of Region 1 counties. Land cover type in Region 1 is predominantly agricultural land, and generally unforested; therefore, wildfire occurrence and risk are not as great as Region 3 where the topography provides abundant sources of natural combustible fuel.

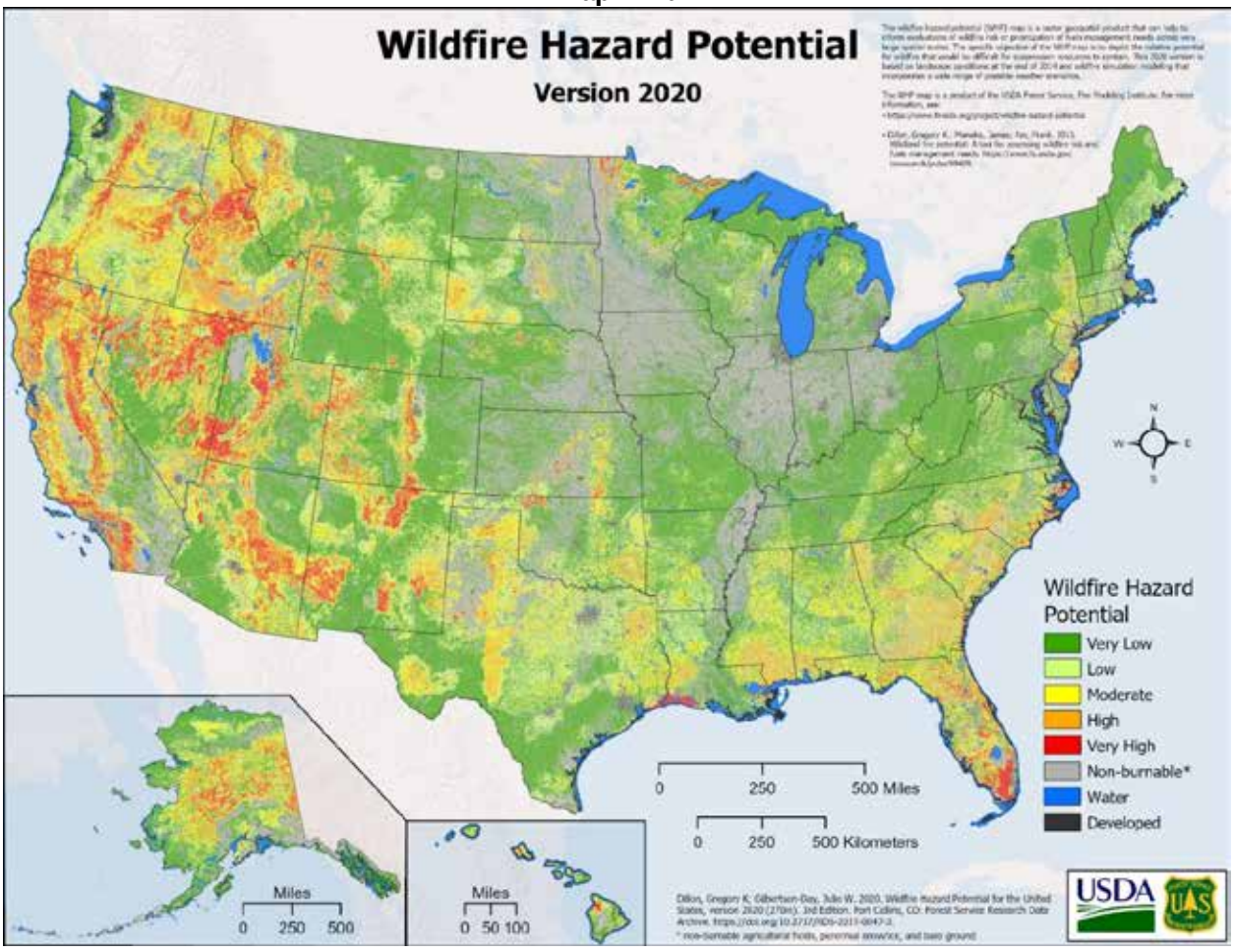
Region 2: The majority of Region 2 lies outside of the ODNR Division of Forestry wildfire protection area – eight counties in the wildfire protection area boundary are included in Region 2: Geauga, Portage, Stark, Ashland, Richland, Knox, Licking and Fairfield. Ashland County contains Mohican State Forest, which is located in Region 2. Region 2 contains Ohio's most developed metropolitan hubs, as well as areas of highest population density. Wildland fuel types (woodland, grasslands) are not as abundant. One notable location for potential large scale and damaging wildfire in Region 2 is the Mentor Marsh in Lake County, east of Cleveland. Mentor Marsh is a 691 acre nature preserve that has converted to nearly a monoculture of 8-12 foot high non-native Phragmites grass. This area is highly flammable, especially in spring with high winds coming off Lake Erie. Mentor Marsh has experienced 10 wildfire events since 1979, four of these being extremely noteworthy: May 1982 – 200 acres, May 1987 – 120 acres, May 1992 – 400 acres, April 2003 – 375 acres. All of these large-scale events were determined to be arson caused. Many homes, businesses, and high valued property are at risk from wildfire events in Mentor Marsh.

Region 3: The ODNR Division of Forestry collects wildfire data from fire departments in all counties of Region 3. Counties within Region 3 represent areas of highest wildfire risk and hazard in the State of Ohio. The vast majority of wildfires in Ohio occur in Region 3 due in part to abundant forested lands and grasslands. Population distribution and regional socio-cultural aspects contribute to higher wildfire occurrence, as well. Topography in Region 3 has more variety with numerous ridges and hollows, as opposed to flatter areas in western and central Ohio, which contributes to more complex wildfire behavior.

Wildfire Hazard Profile

Per the US Forest Service, the Wildfire Hazard Potential (WHP) map is a raster geospatial product produced by the USDA Forest Service, Fire Modeling Institute that can help to inform evaluations of wildfire risk or prioritization of fuels management needs across very large landscapes (millions of acres). It was produced for all of the conterminous United States at a 270-meter resolution. Areas mapped with higher WHP values represent fuels with a higher probability of experiencing torching, crowning, and other forms of extreme fire behavior under conducive weather conditions, based primarily on landscape conditions at the end of 2014 and wildfire simulation modeling that incorporates a wide range of possible weather scenarios. On its own, WHP is not an explicit map of wildfire threat or risk, but when paired with spatial data depicting highly valued resources and assets such as communities, structures, or powerlines, it can approximate relative wildfire risk to those resources and assets. WHP is also not a forecast or wildfire outlook for any particular season, as it does not include any information on current or forecasted weather or fuel moisture conditions. It is instead intended for long-term strategic planning and fuels management.

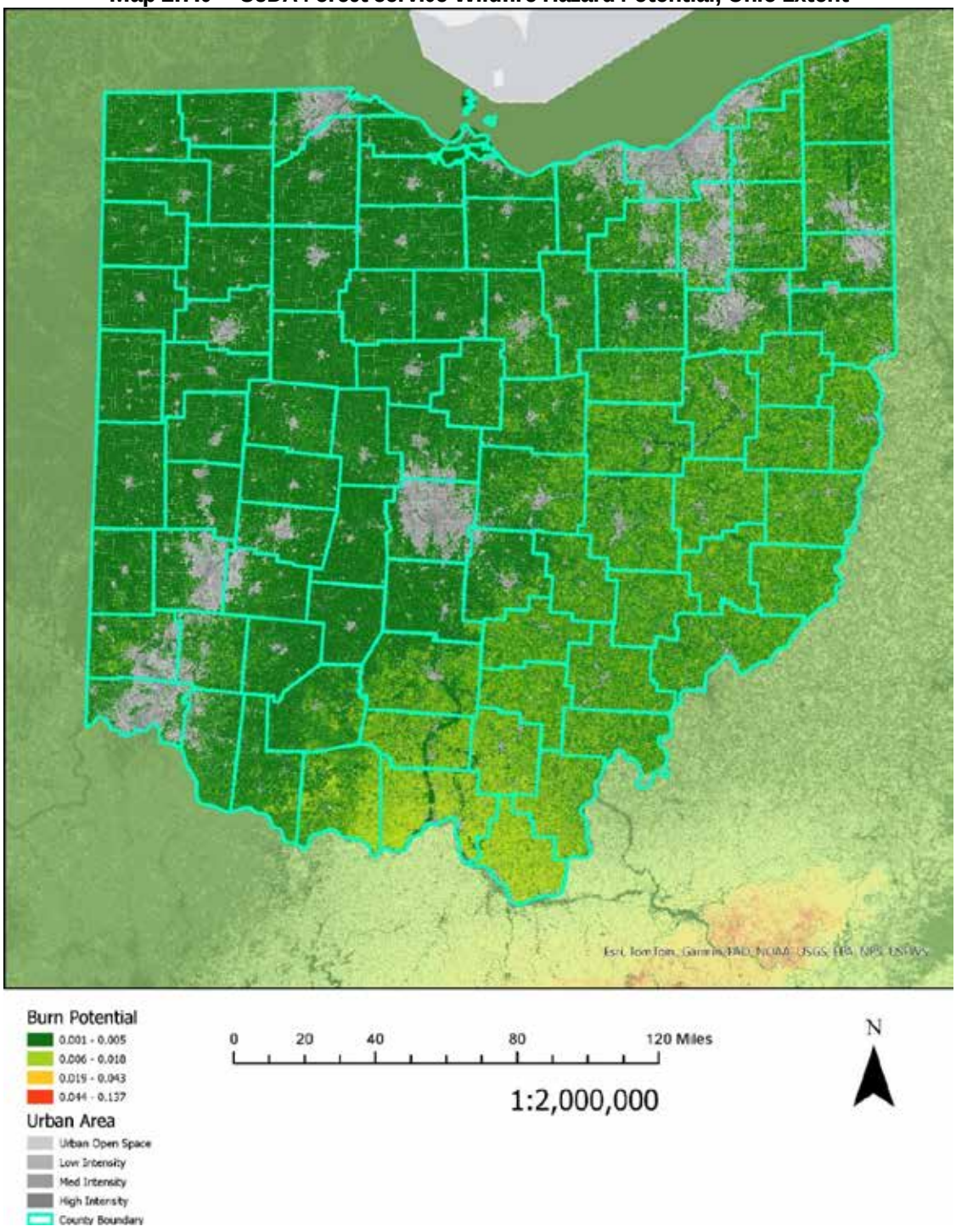
Map 2.7.b



Dillon, G.K.; J. Menakis; and F. Fay. 2015. Wildland Fire Potential: A Tool for Assessing Wildfire Risk and Fuels Management Needs. pp 60-76 In Keane, R. E.; Jolly, M.; Parsons, R.; and Riley, K. Proceedings of the large wildland fires conference; May 19-23, 2014; Missoula, MT. Proc. RMRS-P-73. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 345 p.

Based on the WHP 2020 map, Ohio consists of areas of non-burnable to moderate wildfire potential. Most of the wildfire potential and risk exists in the south eastern portion of the state which is also where the ODNR Division of Forestry primarily designates as wildfire protection area. While the vast majority of the state does not have a high potential of wildfire, the potential exists statewide. Refer to the following section, probability of future events, for a closer look at the USDA Wildfire Hazard Potential assessment for Ohio.

Map 2.7.c— USDA Forest Service Wildfire Hazard Potential, Ohio Extent



USDA Forest Service Wildfire Risks to Communities Platform

The USDA Forest Service Wildfire Risk to Communities is a free, easy-to-use website with interactive maps, charts, and data to help communities in the United States understand, explore, and reduce wildfire risk. Maps and data are available at the community, county, and state levels. It provides information about communities' relative wildfire risk profile, the nature and effects of wildfire risk, and actions communities can take. For example, information can be used to:

- Prioritize mitigation efforts among communities in a state or county with the greatest wildfire risk.
- Identify communities where localized wildfire hazard mitigation and planning efforts are most needed.
- Find resources, partners, and solutions to help manage, mitigate, and reduce risk.

Maps 2.7.d

According to ODNR Forestry, while the assessment was national in scope, some of the results *do not completely align* with their years of local experience and observations – an example of this is the elevated wildfire likelihood shown in Highland, Brown and Clermont Counties. ODNR Forestry's experience and data collection shows that counties with historically higher wildfire occurrence tend to maintain that pattern and can be reasonable assumed to have higher likelihood of wildfire occurrence in the future. Counties that are included in ODNR Forestry's prediction of having higher likelihood of wildfire occurrence cluster around central southern Ohio: Pike, Adams, Scioto, Lawrence, and Gallia counties.

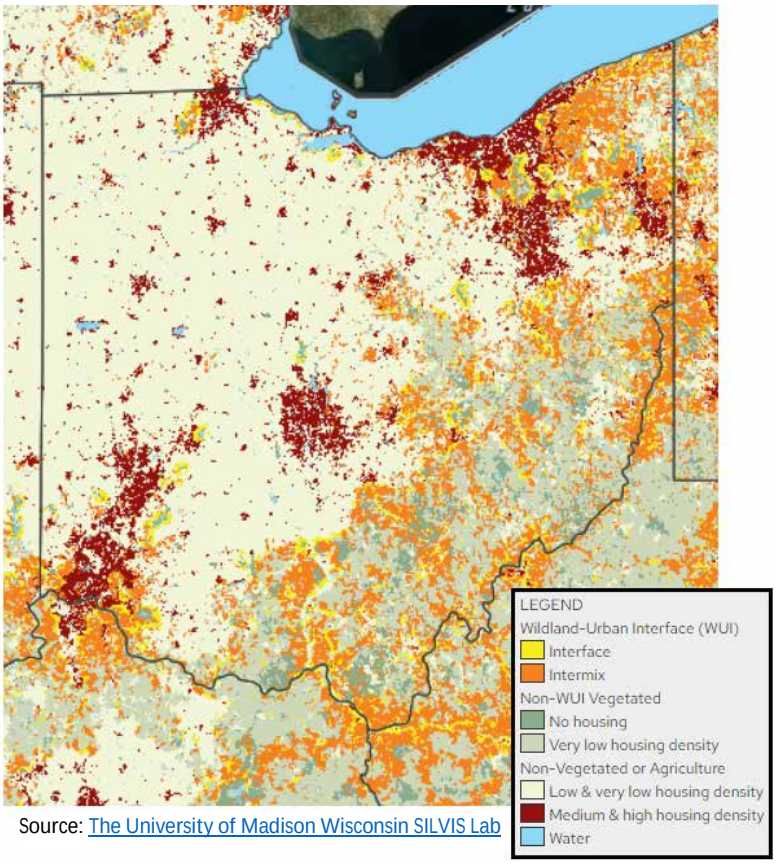
Nearly all wildfires in Ohio are human caused and result from accidents associated with deliberate activities, the main cause being escaped debris burning. ODNR Forestry works hard to promote fire prevention, awareness and outdoor fire safety, especially in these counties; however, activities that have been traditionally practiced by populations in certain parts of Ohio (such as debris burning in these southern Ohio counties) seem to continue despite prevention and education efforts. As a result, past wildfire occurrence is a fairly accurate indicator of where future wildfires are likely to occur.

Wildland-Urban Interface (WUI) Change 1990-2020, University of Madison Wisconsin SILVIS Lab

The University of Madison Wisconsin SILVIS Lab publishes research the Wildland-Urban Interface (WUI) Change 1990-2020. Related publications include: Rapid growth of the US wildland-urban interface raises wildfire risk.

WUI maps are intended to illustrate where the WUI was located in 1990, 2000, 2010, and 2020. There are types of WUI: intermix and interface. Intermix WUI are areas where housing and vegetation intermingle; interface WUI are areas with housing in the vicinity of contiguous wildland vegetation. WUI GIS data were designed to provide a spatially detailed national assessment of the Wildland Urban Interface (WUI) across the conterminous U.S. to support inquiries into the effects of housing growth on the environment, and to inform both national policy and local land management concerning the WUI and associated issues.

Maps 2.7.e – Wildland-Urban Interface (WUI) 2020



Source: The University of Madison Wisconsin SILVIS Lab

HOUSING UNITS	Intermix WUI			
STATE	**1990**	**2000**	**2010**	**2020**
Ohio	306,258	322,787	350,337	346,389
Conterminous U.S.	12,212,669	13,254,402	15,108,293	15,579,050
	Interface WUI			
STATE	**1990**	**2000**	**2010**	**2020**
Ohio	368,800	414,764	439,913	441,323
Conterminous U.S.	17,778,032	21,910,181	26,255,965	28,390,711
	WUI (total)			
STATE	**1990**	**2000**	**2010**	**2020**
Ohio	675,058	737,551	790,250	787,712
Conterminous U.S.	29,990,701	35,164,583	41,364,258	43,969,761

Source: Statewide WUI Totals, The University of Madison Wisconsin SILVIS Lab

The research also estimates the number of housing units within intermix and interface WUIs. The estimates are available in reference years 1990, 2000, 2010, and 2020.

According to these estimates, as of 2020, in Ohio there are 346,389 housing units in the intermix WUI, and 441,323 housing units in the interface WUI.

According the ODNR Forest Service, of note here is the majority of WUI occurs within the ODNR Forestry wildfire protection area. WUI presents a complex hazard when conducting wildfire suppression. Because of the nature of wildfire ignition in Ohio (human caused), the majority of wildfires are within the WUI, or at minimum contain WUI type exposures (homes, buildings, infrastructure, etc.).

PAST OCCURRENCES

Weather is the primary factor that determines the severity of fall and spring wildfire seasons in Ohio. Drought condition, combined with windy days create red flag, or extreme high fire danger. Consequently, the past fire occurrence record can be closely linked to historical weather data. Weather conditions leading up to and in 1930 resulted in the worst year to date for wildfires in Ohio, as 15,400 acres were recorded as burning over the course of the year.

Extreme drought in 1950 that continued for the next several years provided for very active wildfire seasons as well. March 27, 1950 is considered the worst day in Ohio fire control history – 65 fires burned a total of 5,900 acres. In 1952, continued summer drought spurred a record fall fire season in Ohio and neighboring states. ODNR Division of Parks and Division of Wildlife employees assisted in suppression efforts, and the Ohio National Guard also provided assistance. A total of 680 wildfires burned 22,445 acres in the fall of 1952.

Drought conditions in 1963 required placing on alert the ODNR Division of Forestry's pilots, 2000 fire wardens, 150 ODNR Division of Forestry employees, as well as several thousand volunteer firefighters and the Ohio National Guard. One or more fires were reported every day from September 17 through November 29, and October showed a record number of fires for that month.

1988 was another severe wildfire year, as drought conditions required that Civilian Conservation Corps crews be mobilized, as well as all other trained Division employees. More recently, 1999 proved to be a busy year for wildfire in Ohio, as an above average 7,836 acres were burned by nearly 1,500 wildfires.

As previously mentioned, there are two main datasets used to record wildfire incidents: The Ohio Wildfire Reporting System, and the National Fire Incident Reporting System (NFIRS). For the 2024 State of Ohio Hazard Mitigation Plan, the use of the ODNR database was expanded to reflect the 2019 expanded boundaries of the ODNR Forest Fire Protection Area. Counties that previously utilized NFIRS data and are now completely within the ODNR, will now either fully utilize ODNR data or a combination of the two datasets depending on available data.

Tables 2.7.a/b/c below summarizes the wildfire incidents as recorded from both databases. Between the five-year period of 1/1/2018 and 12/31/2022, Ohio has experienced 4,885 wildfires that have burned 11,057 acres within the ODNR Division of Forestry Wildfire Protection Area. It can be safely assumed that less than 100% of all wildfires on state and public land are reported; consequently, actual total occurrence and acres burned are suspected to be higher than data indicate.

Table 2.7.a – Wildfire Incidents Reported, OEMA Region 1

Wildfire Incidents Reported, 2018 to 2022										
County	**Data Source**	**Reported Incidents**	**Annual Probability**	**Injuries**	**Deaths**	**Structures Threatened**	**Structures Destroyed**	**Acres Burned Average**	**Acres Burned Max**	**Acres Burned Total**
Allen	NFIRS	1	18%	N/A	N/A	0	0	0.00	0	0
Auglaize	NFIRS	0	No Data	N/A	N/A	0	0	0.00	0	0
Champaign	NFIRS	15	≥100%	N/A	N/A	0	0	1.69	10	25
Clark	NFIRS	36	≥100%	N/A	N/A	1	0	8.98	200	323
Crawford	NFIRS	3	≥100%	N/A	N/A	0	0	0.53	1	2
Darke	NFIRS	41	≥100%	N/A	N/A	2	0	3.23	50	133
Defiance	NFIRS	5	88%	N/A	N/A	1	0	3.04	10	15
Erie	NFIRS	8	≥100%	N/A	N/A	3	0	4.61	17	37
Fulton	COMBINED	39	≥100%	0	0	9	0	3.13	50	122
Hancock	NFIRS	24	≥100%	N/A	N/A	2	0	1.45	15	35
Hardin	NFIRS	34	≥100%	N/A	N/A	0	0	1.82	15	62
Henry	COMBINED	46	≥100%	1	0	7	0	2.97	58	137
Huron	NFIRS	10	≥100%	N/A	N/A	0	0	0.43	2	4
Logan	NFIRS	24	≥100%	N/A	N/A	0	1	2.24	35	54
Lucas	COMBINED	31	≥100%	1	0	1	0	1.70	25	53
Marion	NFIRS	79	≥100%	N/A	N/A	0	0	15.44	100	1219 [1]
Mercer	NFIRS	2	34%	N/A	N/A	0	0	1.00	1	2
Miami	NFIRS	1	65%	N/A	N/A	0	0	1.00	1	1
Ottawa	NFIRS	22	≥100%	N/A	N/A	0	0	4.76	20	105
Paulding	NFIRS	23	≥100%	N/A	N/A	0	0	1.15	5	26
Preble	NFIRS	6	≥100%	N/A	N/A	0	0	5.02	25	30
Putnam	NFIRS	11	≥100%	N/A	N/A	0	0	1.84	5	20
Sandusky	NFIRS	18	≥100%	N/A	N/A	1	1	0.40	2	7
Seneca	NFIRS	5	≥100%	N/A	N/A	0	0	0.62	1	3
Shelby	NFIRS	1	21%	N/A	N/A	0	0	0.25	0	0
Van Wert	NFIRS	1	30%	N/A	N/A	0	0	2.00	2	2
Williams	NFIRS	4	≥100%	N/A	N/A	0	0	2.00	5	8
Wood	NFIRS	47	≥100%	N/A	N/A	0	0	0.94	6	44
Wyandot	NFIRS	15	≥100%	N/A	N/A	0	0	1.32	7	20
Grand Total		**552**	**≥100%**	**2**	**0**	**27**	**2**			**2,490**

1- From 2021-2022, there were 7 records of wildfire events that claimed 700 acres burned in Marion County and is possibly inaccurate. This county not known for wildfires or burn potential.

Table 2.7.b – Wildfire Incidents Reported, OEMA Region 2

Wildfire Incidents Reported, 2018 to 2022, OEMA Region 2										
County	**Data Source [2]**	**Reported Incidents**	**Annual Probability**	**Injuries [1]**	**Deaths [1]**	**Structures Threatened**	**Structures Destroyed**	**Acres Burned Average**	**Acres Burned Max**	**Acres Burned Total**
Ashland	ODNR	103	≥100%	1	0	2	1	1.34	20	139
Butler	NFIRS	170	≥100%	N/A	N/A	4	0	0.06	1	10
Clinton	NFIRS	85	≥100%	N/A	N/A	0	0	3.73	100	317
Cuyahoga	NFIRS	232	≥100%	N/A	N/A	0	0	0.14	1	32
Delaware	NFIRS	38	≥100%	N/A	N/A	1	0	0.50	5	19
Fairfield	COMBINED	98	≥100%	0	0	12	0	1.37	25	134
Fayette	NFIRS	16	≥100%	N/A	N/A	0	0	2.10	25	34
Franklin	NFIRS	187	≥100%	N/A	N/A	0	0	1.15	100	215
Geauga	COMBINED	23	≥100%	0	0	1	0	0.95	4	22
Greene	NFIRS	75	≥100%	N/A	N/A	0	0	2.78	80	208
Hamilton	NFIRS	50	≥100%	N/A	N/A	4	0	0.75	20	38
Knox	COMBINED	80	≥100%	0	0	17	0	0.70	10	56
Lake	NFIRS	6	≥100%	N/A	N/A	0	0	0.95	3	6
Licking	ODNR	38	≥100%	1	0	4	0	2.26	25	86
Lorain	NFIRS	22	≥100%	N/A	N/A	0	0	1.94	12	43
Madison	NFIRS	14	≥100%	N/A	N/A	0	0	0.62	2	9
Medina	NFIRS	13	≥100%	N/A	N/A	0	0	0.35	1	5
Montgomery	NFIRS	26	≥100%	N/A	N/A	0	0	0.94	6	24
Morrow	NFIRS	16	≥100%	N/A	N/A	0	0	0.91	3	15
Pickaway	NFIRS	38	≥100%	N/A	N/A	0	0	5.51	75	209
Portage	COMBINED	41	≥100%	0	0	4	1	0.92	9	38
Richland	ODNR	33	≥100%	0	0	8	0	2.28	20	75
Stark	ODNR	14	≥100%	1	0	5	0	4.98	45	70
Summit	NFIRS	56	≥100%	N/A	N/A	3	0	0.61	9	34
Union	NFIRS	131	≥100%	N/A	N/A	0	0	2.17	40	284
Warren	NFIRS	697	≥100%	N/A	N/A	0	0	0.17	40	118
Wayne	NFIRS	2	66%	N/A	N/A	0	0	0.75	1	2
Grand Total		**2,304**	**≥100%**	**1**	**0**	**65**	**2**			**2,239**

Table 2.7.c – Wildfire Incidents Reported, OEMA Region 3

Wildfire Incidents Reported, 2018 to 2022										
County	**Data Source**	**Reported Incidents**	**Annual Probability**	**Injuries**	**Deaths**	**Structures Threatened**	**Structures Destroyed**	**Acres Burned Average**	**Acres Burned Max**	**Acres Burned Total**
Adams	ODNR	72	≥100%	2	0	24	2	4.05	125	292
Ashtabula	COMBINED	72	≥100%	0	0	0	0	5.19	90	374
Athens	ODNR	69	≥100%	0	0	22	0	1.50	20	104
Belmont	ODNR	60	≥100%	0	0	3	0	3.35	100	201
Brown	COMBINED	35	≥100%	0	0	7	0	1.94	50	68
Carroll	ODNR	30	≥100%	0	0	2	0	2.38	10	71
Clermont	ODNR	55	≥100%	0	0	3	1	0.52	5	29
Columbiana	COMBINED	79	≥100%	1	0	5	1	1.70	20	134
Coshocton	ODNR	55	≥100%	2	0	6	2	1.77	14	97
Gallia	ODNR	96	≥100%	0	0	11	0	3.36	50	323
Guernsey	ODNR	69	≥100%	0	0	31	0	1.14	10	78
Harrison	ODNR	30	≥100%	0	0	8	0	2.16	11	65
Highland	ODNR	16	≥100%	0	0	2	0	1.40	5	22
Hocking	ODNR	73	≥100%	0	0	16	1	1.06	5	77
Holmes	ODNR	44	≥100%	1	0	6	0	1.47	10	65
Jackson	ODNR	38	≥100%	0	0	19	0	3.53	25	134
Jefferson	ODNR	21	≥100%	0	0	0	0	2.06	12	43
Lawrence	ODNR	109	≥100%	0	0	53	2	10.07	450	1,098
Mahoning	ODNR	25	≥100%	0	0	2	0	1.47	10	37
Meigs	ODNR	70	≥100%	2	0	14	0	1.37	10	96
Monroe	ODNR	20	≥100%	0	0	0	0	1.46	5	29
Morgan	ODNR	23	≥100%	0	0	2	1	2.69	10	62
Muskingum	ODNR	135	≥100%	1	0	16	1	1.40	20	189
Noble	ODNR	40	≥100%	3	0	0	0	3.09	60	124
Perry	ODNR	83	≥100%	0	0	15	1	1.48	20	123
Pike	ODNR	134	≥100%	1	0	13	1	2.89	50	388
Ross	ODNR	98	≥100%	5	0	22	0	4.57	100	448
Scioto	ODNR	145	≥100%	4	0	18	0	7.15	250	1,037
Trumbull	COMBINED	66	≥100%	0	0	12	0	2.82	45	186
Tuscarawas	ODNR	75	≥100%	1	0	7	1	1.60	18	120
Vinton	ODNR	48	≥100%	0	0	11	1	2.06	10	99
Washington	ODNR	44	≥100%	1	0	4	1	2.72	50	120
Grand Total		**2,029**	**≥100%**	**24**	**0**	**354**	**16**			**6,329**

PROBABILITY OF FUTURE EVENTS

Based on reported historical events from January 2018 to December 2022, there is a 100% probability that a wildfire will occur in the majority of counties in Ohio in any given year. However, the severity of these events will depend on many factors. According to research and the historical record, wildfires have occurred every spring and fall in the hardwood forests and grasslands of southern, southeastern, and eastern Ohio for hundreds of years, and will continue to do so. The number of occurrences, size of wildfires, and severity of burn fluctuate annually in response to a variety of factors including:

- Weather – daily, monthly, seasonal, annual, and long-term trends in:
  - Precipitation
  - Relative Humidity
  - Temperature
  - Wind
- Fuels – condition of 1, 10, 100, 1000 hour fuels in terms of:
  - Moisture content
  - Arrangement
  - Accumulation level
  - Availability
  - See Map 2.7.b for The Wildfire Hazard Potential in Ohio, developed by the USDA Forest Service. It is a represention of fuels with a higher probability of experiencing extreme fire behavior under conducive weather conditions, based primarily on landscape.
- Ignitions – presence or absence of wildfire starts:
  - Human caused
    - Debris burning – compliance with ORC 1503.18, and safe debris burning techniques
    - Incendiary – arsonists at large
    - Wildfire prevention and awareness efforts
- Suppression Response – Capability and timeliness of initial attack:
  - Quickness of response to the incident
  - Local / Volunteer fire department capability
  - Availability of state and local resources
    - Number of concurrent wildfires

In an effort to anticipate severity and probability of future wildfire occurrences, the Ohio Division of Forestry closely monitors current and predicted weather conditions, as well as seasonal trends, to determine periods of elevated wildfire danger. Resources that assist with this include:

- Remote Automatic Weather Stations (RAWS) – The Division of Forestry maintains 7 RAWS units in southern and eastern Ohio.
- National Weather Service - The Division of Forestry works in cooperation with NWS offices in the interpretation of weather data, as well as issuance of fire weather warnings, hazardous weather statements, and Red Flag warnings.

- Easter Area Coordination Center (EACC) Predictive Services group – EACC provides regional fire weather and fuels analysis and modeling products that are helpful in identifying potentially problematic fire weather and likelihood of receptive fuels.
- Interagency Cooperation – The Ohio Division of Forestry works cooperatively with the Wayne National Forest to monitor local fire weather, ignition/occurrence patterns, fuels conditions, and other locally specific data pertaining to wildland fire.

VULNERABILITY ANALYSIS & LOSS ESTIMATION METHODOLOGY

The FEMA National Risk Index (NRI) is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards. For wildfire, the Expected Annual Loss was determined by multiplying the frequency, exposure, and the historical loss ratio. This equation was calculated to determine population, agriculture, and building losses. For more information on current methods and data, refer to section 23 of the National Risk Index Technical Manual.

Table 2.7.d

FEMA National Risk Index Wildfire Analysis, OEMA Region 1								
County	Exposure (Sq. Mi)	Exposure (Buildings)	Exposure (Population)	Exposure (Agriculture)	Expected Annual Loss (Buildings)	Expected Annual Loss (Population Equivalence)	Expected Annual Loss (Agriculture)	Expected Annual Loss (Total)
Allen	16.41	$ 1,398,712,984.41	6,867	$ 8,496,673	$ 6,075.73	$ 527.71	$ 1.60	$ 6,605.04
Auglaize	25.96	$ 1,211,804,555.75	5,609	$ 19,961,496	$ 4,969.62	$ 409.47	$ 3.29	$ 5,382.38
Champaign	21.64	$ 754,088,150.98	4,342	$ 7,898,795	$ 3,411.21	$ 345.39	$ 1.28	$ 3,757.87
Clark	54.66	$ 6,105,803,143.32	29,562	$ 24,238,252	$ 24,504.34	$ 2,076.79	$ 3.30	$ 26,584.43
Crawford	4.85	$ 177,610,938.65	1,146	$ 5,495,515	$ 2,358.92	$ 272.72	$ 2.65	$ 2,634.29
Darke	69.47	$ 3,334,185,550.41	12,967	$ 165,276,315	$ 13,336.74	$ 909.04	$ 22.44	$ 14,268.23
Defiance	58.43	$ 1,924,586,320.83	10,032	$ 26,973,809	$ 7,698.35	$ 703.24	$ 3.66	$ 8,405.24
Erie	35.02	$ 3,934,525,011.36	17,176	$ 20,015,485	$ 15,738.10	$ 1,204.04	$ 2.72	$ 16,944.86
Fulton	43.51	$ 2,191,537,664.60	11,784	$ 36,106,039	$ 8,766.15	$ 826.05	$ 4.90	$ 9,597.11
Hancock	7.71	$ 411,023,590.57	2,128	$ 2,851,964	$ 2,316.80	$ 209.39	$ 0.69	$ 2,526.88
Hardin	5.27	$ 115,818,939.46	521	$ 4,816,425	$ 1,117.96	$ 98.84	$ 4.06	$ 1,220.86
Henry	26.29	$ 1,033,256,683.95	4,707	$ 14,046,901	$ 4,133.03	$ 330.00	$ 1.91	$ 4,464.93
Huron	47.46	$ 2,468,366,221.77	13,217	$ 32,150,803	$ 10,035.49	$ 941.26	$ 4.49	$ 10,981.24
Logan	9.76	$ 506,657,596.63	1,840	$ 3,780,384	$ 4,770.13	$ 298.95	$ 1.52	$ 5,070.60
Lucas	42.49	$ 14,722,221,549.75	71,122	$ 10,657,452	$ 58,888.88	$ 4,985.81	$ 1.45	$ 63,876.14
Marion	3.55	$ 145,844,699.84	777	$ 2,370,496	$ 2,218.63	$ 179.47	$ 2.03	$ 2,400.13
Mercer	45.91	$ 2,852,671,139.05	8,661	$ 169,538,699	$ 11,410.68	$ 607.12	$ 23.02	$ 12,040.83
Miami	70.10	$ 6,847,422,870.30	29,993	$ 25,444,581	$ 27,389.69	$ 2,102.59	$ 3.46	$ 29,495.74
Ottawa	27.16	$ 3,753,368,533.20	10,410	$ 9,610,350	$ 15,024.37	$ 730.42	$ 1.31	$ 15,756.10
Paulding	35.32	$ 1,168,121,858.46	4,335	$ 50,655,175	$ 4,672.49	$ 303.93	$ 6.88	$ 4,983.29
Preble	67.01	$ 3,055,667,543.15	15,658	$ 38,145,272	$ 12,224.99	$ 1,097.65	$ 5.18	$ 13,327.82
Putnam	22.53	$ 712,301,977.97	3,780	$ 29,181,566	$ 2,849.21	$ 264.96	$ 4.03	$ 3,118.20
Sandusky	20.04	$ 1,207,999,204.92	4,856	$ 7,069,176	$ 4,935.17	$ 346.46	$ 1.03	$ 5,282.66
Seneca	10.37	$ 353,534,717.17	1,555	$ 3,811,994	$ 1,999.03	$ 149.56	$ 0.80	$ 2,149.39
Shelby	36.19	$ 2,211,591,542.48	7,604	$ 36,450,790	$ 8,945.85	$ 541.11	$ 5.04	$ 9,492.01
Van Wert	27.83	$ 1,027,254,500.37	5,027	$ 25,756,252	$ 4,109.02	$ 352.38	$ 3.50	$ 4,464.90
Williams	85.28	$ 2,767,731,941.46	10,698	$ 40,696,299	$ 11,070.93	$ 749.94	$ 5.53	$ 11,826.39
Wood	38.81	$ 5,634,747,444.91	21,219	$ 16,426,543	$ 22,575.53	$ 1,490.30	$ 2.32	$ 24,068.15
Wyandot	2.93	$ 62,614,097.31	314	$ 2,477,757	$ 924.12	$ 63.60	$ 2.65	$ 990.37

Table 2.7.e

FEMA National Risk Index Wildfire Analysis, OEMA Region 2								
County	Exposure (Sq. Mi)	Exposure (Buildings)	Exposure (Population)	Exposure (Agriculture)	Expected Annual Loss (Buildings)	Expected Annual Loss (Population Equivalence)	Expected Annual Loss (Agriculture)	Expected Annual Loss (Total)
Ashland	114.62	$ 6,613,424,974.67	24,745	$ 58,171,406	$ 26,455.37	$ 1,734.80	$ 7.90	$ 28,198.07
Butler	55.76	$ 10,865,501,458.62	59,771	$ 9,976,474	$ 89,353.59	$ 8,997.01	$ 8.40	$ 98,359.00
Clinton	26.50	$ 1,654,093,743.42	7,688	$ 9,218,330	$ 6,987.26	$ 570.72	$ 1.32	$ 7,559.31
Cuyahoga	43.05	$ 37,661,752,312.22	179,830	$ 2,661,526	$ 150,647.01	$ 12,606.51	$ 0.36	$ 163,253.88
Delaware	14.07	$ 2,560,422,905.11	10,749	$ 3,642,937	$ 56,018.41	$ 4,046.02	$ 3.02	$ 60,067.45
Fairfield	23.92	$ 2,051,140,435.42	13,074	$ 6,702,029	$ 34,002.57	$ 3,420.95	$ 2.92	$ 37,426.44
Fayette	7.99	$ 389,468,196.45	1,150	$ 3,197,117	$ 5,052.92	$ 240.49	$ 2.10	$ 5,295.51
Franklin	11.50	$ 5,794,630,719.97	33,352	$ 2,454,292	$ 30,395.24	$ 2,858.36	$ 0.88	$ 33,254.48
Geauga	53.70	$ 7,913,011,602.34	35,739	$ 15,336,619	$ 31,701.59	$ 2,512.65	$ 2.09	$ 34,216.33
Greene	77.90	$ 11,885,849,502.07	59,031	$ 23,439,913	$ 47,543.40	$ 4,138.20	$ 3.18	$ 51,684.78
Hamilton	39.85	$ 23,097,426,388.13	134,820	$ 6,010,341	$ 105,238.56	$ 10,707.23	$ 2.30	$ 115,948.09
Knox	124.51	$ 6,218,127,419.52	28,843	$ 60,720,281	$ 24,876.20	$ 2,022.44	$ 8.25	$ 26,906.89
Lake	24.72	$ 8,918,281,576.40	44,001	$ 38,560,403	$ 35,719.03	$ 3,087.33	$ 5.27	$ 38,811.63
Licking	133.77	$ 11,250,117,296.92	54,934	$ 76,010,144	$ 46,688.46	$ 4,007.22	$ 10.52	$ 50,706.21
Lorain	92.16	$ 17,388,581,056.89	83,911	$ 43,266,044	$ 69,849.54	$ 5,903.32	$ 5.94	$ 75,758.80
Madison	13.84	$ 572,095,827.04	3,377	$ 6,405,181	$ 2,310.86	$ 238.42	$ 0.94	$ 2,550.22
Medina	104.58	$ 14,250,331,399.38	66,579	$ 23,306,457	$ 57,031.76	$ 4,670.08	$ 3.17	$ 61,705.01
Montgomery	93.44	$ 21,494,547,747.13	107,081	$ 28,433,882	$ 85,978.19	$ 7,506.63	$ 3.86	$ 93,488.68
Morrow	42.74	$ 1,331,615,901.91	7,998	$ 13,875,287	$ 11,483.65	$ 1,030.44	$ 3.01	$ 12,517.09
Pickaway	11.75	$ 552,897,056.44	2,750	$ 4,185,366	$ 21,246.90	$ 1,862.71	$ 5.35	$ 23,114.96
Portage	82.63	$ 9,767,986,449.13	50,426	$ 14,336,237	$ 39,140.24	$ 3,542.86	$ 1.95	$ 42,685.06
Richland	81.80	$ 7,034,418,226.90	39,801	$ 50,614,334	$ 28,596.49	$ 2,847.50	$ 7.21	$ 31,451.20
Stark	160.69	$ 23,433,526,787.19	121,199	$ 55,318,881	$ 93,737.08	$ 8,496.43	$ 7.51	$ 102,241.03
Summit	57.36	$ 26,500,244,791.45	130,102	$ 7,066,053	$ 106,012.67	$ 9,121.76	$ 0.96	$ 115,135.40
Union	5.60	$ 343,002,107.15	1,613	$ 4,046,468	$ 4,911.44	$ 464.42	$ 2.14	$ 5,378.01
Warren	111.34	$ 21,940,671,609.88	109,131	$ 19,865,370	$ 87,998.55	$ 7,676.15	$ 2.73	$ 95,677.43
Wayne	179.40	$ 10,350,391,261.44	53,596	$ 181,413,621	$ 41,401.56	$ 3,757.21	$ 24.63	$ 45,183.41

Table 2.7.f

FEMA National Risk Index Wildfire Analysis, OEMA Region 3								
County	Exposure (Sq. Mi)	Exposure (Buildings)	Exposure (Population)	Exposure (Agriculture)	Expected Annual Loss (Buildings)	Expected Annual Loss (Population Equivalence)	Expected Annual Loss (Agriculture)	Expected Annual Loss (Total)
Adams	35.11	$ 1,213,149,844.07	4,786	$ 8,103,641	$ 296,360.63	$ 41,927.38	$ 96.82	$ 338,384.83
Ashtabula	93.17	$ 5,913,533,021.21	29,439	$ 20,870,946	$ 23,669.19	$ 2,066.10	$ 2.84	$ 25,738.13
Athens	32.81	$ 2,398,387,036.74	13,245	$ 3,324,457	$ 10,151.61	$ 1,004.37	$ 0.54	$ 11,156.53
Belmont	160.46	$ 6,988,184,409.44	36,398	$ 26,756,889	$ 27,952.74	$ 2,551.57	$ 3.63	$ 30,507.94
Brown	34.87	$ 1,339,051,119.45	6,857	$ 7,077,846	$ 208,993.44	$ 39,302.21	$ 54.08	$ 248,349.73
Carroll	118.37	$ 3,327,867,397.24	17,594	$ 41,179,144	$ 13,311.47	$ 1,233.36	$ 5.59	$ 14,550.42
Clermont	32.65	$ 7,414,270,495.51	41,816	$ 3,674,092	$ 87,761.87	$ 20,542.62	$ 5.83	$ 108,310.32
Columbiana	145.33	$ 9,860,532,191.16	49,680	$ 71,815,987	$ 39,442.13	$ 3,482.70	$ 9.75	$ 42,934.58
Coshocton	129.29	$ 3,697,403,359.66	18,827	$ 73,279,532	$ 14,789.61	$ 1,319.82	$ 9.95	$ 16,119.39
Gallia	9.77	$ 290,097,650.05	1,766	$ 1,495,178	$ 35,383.08	$ 7,636.70	$ 6.93	$ 43,026.72
Guernsey	133.92	$ 4,814,685,093.17	22,475	$ 23,774,175	$ 19,258.74	$ 1,575.51	$ 3.23	$ 20,837.48
Harrison	103.53	$ 1,861,716,657.89	9,820	$ 16,582,719	$ 7,446.87	$ 688.42	$ 2.25	$ 8,137.54
Highland	41.51	$ 1,515,202,461.49	6,751	$ 13,835,748	$ 256,642.27	$ 39,343.43	$ 82.79	$ 296,068.48
Hocking	17.41	$ 1,925,454,188.53	8,178	$ 1,019,448	$ 8,399.30	$ 619.37	$ 0.20	$ 9,018.88
Holmes	165.00	$ 7,984,102,273.85	31,699	$ 145,378,653	$ 31,936.41	$ 2,222.18	$ 19.74	$ 34,178.32
Jackson	6.34	$ 261,181,724.65	1,525	$ 629,225	$ 11,273.31	$ 2,156.77	$ 1.62	$ 13,431.70
Jefferson	92.10	$ 6,781,059,829.03	30,636	$ 8,898,956	$ 27,124.24	$ 2,147.69	$ 1.21	$ 29,273.13
Lawrence	6.98	$ 519,681,520.65	3,409	$ 358,934	$ 138,813.59	$ 33,323.70	$ 3.25	$ 172,140.54
Mahoning	84.31	$ 13,200,790,141.50	60,460	$ 36,307,276	$ 52,893.48	$ 4,246.98	$ 4.94	$ 57,145.40
Meigs	14.86	$ 688,998,323.60	3,196	$ 2,202,982	$ 2,969.84	$ 243.97	$ 0.48	$ 3,214.30
Monroe	74.10	$ 2,470,882,641.15	10,140	$ 12,898,409	$ 9,883.53	$ 710.84	$ 1.75	$ 10,596.13
Morgan	64.46	$ 1,504,852,763.38	8,183	$ 13,109,766	$ 6,019.78	$ 573.72	$ 1.78	$ 6,595.28
Muskingum	159.03	$ 8,577,985,067.71	42,050	$ 52,321,325	$ 34,322.09	$ 2,948.99	$ 7.11	$ 37,278.19
Noble	77.99	$ 3,145,658,665.33	9,410	$ 7,338,644	$ 12,582.63	$ 659.67	$ 1.00	$ 13,243.30
Perry	44.87	$ 1,784,047,417.99	12,045	$ 10,181,225	$ 7,406.74	$ 856.57	$ 1.44	$ 8,264.75
Pike	7.55	$ 226,037,397.06	1,328	$ 3,926,044	$ 19,944.08	$ 4,314.96	$ 20.43	$ 24,279.47
Ross	29.80	$ 1,078,962,051.30	6,665	$ 5,956,354	$ 118,808.21	$ 12,625.46	$ 22.74	$ 131,456.41
Scioto	7.09	$ 385,529,336.08	2,873	$ 660,263	$ 34,924.88	$ 9,285.63	$ 1.91	$ 44,212.42
Trumbull	74.65	$ 10,123,014,391.18	49,284	$ 17,684,913	$ 40,620.21	$ 3,465.63	$ 2.42	$ 44,088.26
Tuscarawas	143.21	$ 7,650,604,250.17	41,022	$ 101,568,266	$ 30,602.42	$ 2,875.71	$ 13.79	$ 33,491.92
Vinton	5.08	$ 212,429,692.12	1,102	$ 420,298	$ 1,434.02	$ 143.93	$ 0.12	$ 1,578.06
Washington	122.60	$ 4,845,247,118.52	31,602	$ 32,192,313	$ 19,380.99	$ 2,215.35	$ 4.37	$ 21,600.71

STATE-OWNED AND STATE-LEASED CRITICAL FACILITIES VULNERABILITY ANALYSIS & LOSS ESTIMATION

METHODOLOGY

The state-owned and state-leased critical facilities datasets were used to perform an analysis based upon the spatial location of each critical facility, the replacement cost of that facility, and FEMA National Risk Index Wildfire Hazard Risk Index score/rating from the NRI at the census tract level. For more information on current methodology and data, refer to section 22 of the National Risk Index Technical Manual.

Table 2.15.g – State Owned and State Leased Critical Facilities by County and NRI Hazard Risk Rating, OEMA Region 1

	No Rating		Very Low		Relatively Low		Relatively Moderate		Relatively High		Very High	
County	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**
ALLEN	0	$ -	99	$ 148,535,104.00	0	$ -	0	$ -	0	$ -	0	$ -
AUGLAIZE	0	$ -	11	$ 5,621,501.00	7	$ 921,318.00	0	$ -	0	$ -	0	$ -
CHAMPAIGN	0	$ -	13	$ 7,720,300.00	8	$ 1,525,793.00	0	$ -	0	$ -	0	$ -
CLARK	0	$ -	2	$ 592,617.00	25	$ 9,058,305.00	0	$ -	0	$ -	0	$ -
CRAWFORD	0	$ -	12	$ 11,520,706.00	0	$ -	0	$ -	0	$ -	0	$ -
DARKE	0	$ -	0	$ -	27	$ 17,992,955.00	0	$ -	0	$ -	0	$ -
DEFIANCE	0	$ -	0	$ -	15	$ 12,622,421.00	0	$ -	0	$ -	0	$ -
ERIE	1	$ 38,551.00	0	$ -	54	$ 150,111,057.00	0	$ -	0	$ -	0	$ -
FULTON	0	$ -	0	$ -	12	$ 9,821,963.00	0	$ -	0	$ -	0	$ -
HANCOCK	0	$ -	18	$ 12,174,748.00	2	$ 47,101.00	0	$ -	0	$ -	0	$ -
HARDIN	0	$ -	11	$ 3,099,615.00	7	$ 3,726,143.00	0	$ -	0	$ -	0	$ -
HENRY	0	$ -	2	$ 585,529.00	14	$ 3,664,717.00	0	$ -	0	$ -	0	$ -
HURON	0	$ -	0	$ -	22	$ 10,837,350.00	0	$ -	0	$ -	0	$ -
LOGAN	0	$ -	7	$ 1,477,752.00	14	$ 7,912,178.00	0	$ -	0	$ -	0	$ -
LUCAS	5	$ 969,594.00	4	$ 13,244,891.00	43	$ 260,283,261.00	0	$ -	0	$ -	0	$ -
MARION	1	$ 29,863.00	58	$ 237,024,291.00	0	$ -	0	$ -	0	$ -	0	$ -
MERCER	0	$ -	0	$ -	27	$ 9,141,086.00	0	$ -	0	$ -	0	$ -
MIAMI	0	$ -	3	$ 3,941,499.00	27	$ 17,053,167.00	0	$ -	0	$ -	0	$ -
OTTAWA	0	$ -	1	$ 37,059.00	51	$ 42,200,876.00	0	$ -	0	$ -	0	$ -
PAULDING	0	$ -	0	$ -	11	$ 8,375,639.00	0	$ -	0	$ -	0	$ -
PREBLE	0	$ -	0	$ -	28	$ 7,555,863.00	0	$ -	0	$ -	0	$ -
PUTNAM	0	$ -	15	$ 3,421,607.00	4	$ 1,435,662.00	0	$ -	0	$ -	0	$ -
SANDUSKY	0	$ -	1	$ 27,722.00	13	$ 8,605,780.00	0	$ -	0	$ -	0	$ -
SENECA	0	$ -	47	$ 47,263,743.00	0	$ -	0	$ -	0	$ -	0	$ -
SHELBY	0	$ -	0	$ -	35	$ 32,329,725.00	0	$ -	0	$ -	0	$ -
VAN WERT	0	$ -	2	$ 44,015.00	14	$ 7,728,799.00	0	$ -	0	$ -	0	$ -
WILLIAMS	0	$ -	0	$ -	17	$ 7,837,080.00	0	$ -	0	$ -	0	$ -
WOOD	0	$ -	5	$ 13,428,519.00	35	$ 54,864,046.00	0	$ -	0	$ -	0	$ -
WYANDOT	0	$ -	22	$ 6,729,710.00	0	$ -	0	$ -	0	$ -	0	$ -
Grand Total	**7**	**$ 1,038,008.00**	**333**	**$ 516,490,928.00**	**512**	**$ 685,652,285.00**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**

Table 2.15.h – State Owned and State Leased Critical Facilities by County and NRI Hazard Risk Rating, OEMA Region 2

	No Rating		Very Low		Relatively Low		Relatively Moderate		Relatively High		Very High	
County	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**
ASHLAND	0	$ -	1	$ 23,670.00	144	$ 103,467,432.00	0	$ -	0	$ -	0	$ -
BUTLER	0	$ -	0	$ -	29	$ 17,200,279.00	0	$ -	0	$ -	0	$ -
CLINTON	0	$ -	4	$ 941,745.00	27	$ 12,508,772.00	0	$ -	0	$ -	0	$ -
CUYAHOGA	30	$ 195,431,106.00	22	$ 32,092,106.00	54	$ 162,098,711.00	0	$ -	0	$ -	0	$ -
DELAWARE	2	$ 91,790.00	3	$ 16,681,819.00	28	$ 44,228,972.00	0	$ -	0	$ -	0	$ -
FAIRFIELD	0	$ -	12	$ 4,447,243.00	55	$ 90,110,306.00	0	$ -	0	$ -	0	$ -
FAYETTE	0	$ -	6	$ 8,209,189.00	17	$ 2,843,221.00	0	$ -	0	$ -	0	$ -
FRANKLIN	37	$ 1,319,103,707.00	116	$ 900,824,388.00	37	$ 117,034,961.00	0	$ -	0	$ -	0	$ -
GEAUGA	0	$ -	0	$ -	27	$ 12,064,728.00	0	$ -	0	$ -	0	$ -
GREENE	0	$ -	0	$ -	21	$ 17,560,312.00	0	$ -	0	$ -	0	$ -
HAMILTON	3	$ 476,442.00	9	$ 21,389,452.00	29	$ 91,450,895.00	0	$ -	0	$ -	0	$ -
KNOX	0	$ -	0	$ -	41	$ 76,691,486.00	0	$ -	0	$ -	0	$ -
LAKE	0	$ -	10	$ 10,284,888.00	11	$ 2,703,214.00	0	$ -	0	$ -	0	$ -
LICKING	0	$ -	5	$ 14,273,506.00	62	$ 172,467,950.00	0	$ -	0	$ -	0	$ -
LORAIN	0	$ -	3	$ 2,198,821.00	80	$ 210,191,768.00	0	$ -	0	$ -	0	$ -
MADISON	0	$ -	86	$ 389,068,715.00	18	$ 9,442,858.00	0	$ -	0	$ -	0	$ -
MEDINA	0	$ -	0	$ -	17	$ 16,239,799.00	0	$ -	0	$ -	0	$ -
MONTGOMERY	3	$ 871,658.00	2	$ 2,816,160.00	67	$ 184,208,998.00	0	$ -	0	$ -	0	$ -
MORROW	0	$ -	0	$ -	19	$ 12,996,576.00	0	$ -	0	$ -	0	$ -
PICKAWAY	1	$ 36,502.00	98	$ 284,296,129.00	38	$ 62,290,013.00	0	$ -	0	$ -	0	$ -
PORTAGE	0	$ -	1	$ 130,120.00	24	$ 17,663,460.00	0	$ -	0	$ -	0	$ -
RICHLAND	0	$ -	2	$ 265,172.00	75	$ 236,733,275.00	0	$ -	0	$ -	0	$ -
STARK	3	$ 1,796,245.00	2	$ 766,984.00	52	$ 146,078,356.00	0	$ -	0	$ -	0	$ -
SUMMIT	0	$ -	5	$ 5,190,784.00	60	$ 192,765,690.00	0	$ -	0	$ -	0	$ -
UNION	0	$ -	48	$ 166,248,757.00	7	$ 3,189,715.00	0	$ -	0	$ -	0	$ -
WARREN	0	$ -	88	$ 308,271,672.00	21	$ 15,447,776.00	0	$ -	0	$ -	0	$ -
WAYNE	0	$ -	1	$ 22,422.00	21	$ 12,180,381.00	0	$ -	0	$ -	0	$ -
Grand Total	**79**	**$ 1,517,807,450.00**	**524**	**$ 2,168,443,742.00**	**1,081**	**$ 2,041,859,904.00**	**0**	**$ -**	**0**	**$ -**	**0**	**$ -**

Table 2.15.i – State Owned and State Leased Critical Facilities by County and NRI Hazard Risk Rating, OEMA Region 3

	No Rating		Very Low		Relatively Low		Relatively Moderate		Relatively High		Very High	
County	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**	**# of CF**	**Replacement Cost**
ADAMS	0	$ -	0	$ -	27	$ 11,652,213.00	2	$ 674,000.00	1	$ 346,092.00	0	$ -
ASHTABULA	0	$ -	0	$ -	72	$ 25,195,278.00	0	$ -	0	$ -	0	$ -
ATHENS	0	$ -	11	$ 40,591,259.00	24	$ 12,660,355.00	0	$ -	0	$ -	0	$ -
BELMONT	0	$ -	0	$ -	70	$ 153,564,299.00	0	$ -	0	$ -	0	$ -
BROWN	0	$ -	0	$ -	1	$ 53,051.00	30	$ 35,334,395.00	0	$ -	0	$ -
CARROLL	0	$ -	0	$ -	18	$ 5,220,361.00	0	$ -	0	$ -	0	$ -
CLERMONT	0	$ -	0	$ -	51	$ 32,967,768.00	0	$ -	0	$ -	0	$ -
COLUMBIANA	0	$ -	0	$ -	36	$ 14,981,757.00	0	$ -	0	$ -	0	$ -
COSHOCTON	0	$ -	1	$ 23,237.00	20	$ 16,789,804.00	0	$ -	0	$ -	0	$ -
GALLIA	0	$ -	0	$ -	42	$ 40,526,483.00	19	$ 9,259,735.00	0	$ -	0	$ -
GUERNSEY	0	$ -	0	$ -	50	$ 58,733,742.00	0	$ -	0	$ -	0	$ -
HARRISON	0	$ -	0	$ -	24	$ 9,202,405.00	0	$ -	0	$ -	0	$ -
HIGHLAND	0	$ -	0	$ -	0	$ -	11	$ 6,701,555.00	0	$ -	0	$ -
HOCKING	0	$ -	0	$ -	27	$ 7,590,230.00	0	$ -	0	$ -	0	$ -
HOLMES	0	$ -	0	$ -	29	$ 9,188,433.00	0	$ -	0	$ -	0	$ -
JACKSON	0	$ -	9	$ 3,591,935.00	11	$ 6,356,750.00	1	$ 262,400.00	0	$ -	0	$ -
JEFFERSON	0	$ -	1	$ 21,541.00	33	$ 14,664,356.00	0	$ -	0	$ -	0	$ -
LAWRENCE	9	$ 3,335,811.00	0	$ -	4	$ 2,753,400.00	13	$ 3,078,228.00	0	$ -	0	$ -
MAHONING	0	$ -	5	$ 670,859.00	53	$ 109,007,315.00	0	$ -	0	$ -	0	$ -
MEIGS	0	$ -	2	$ 872,300.00	22	$ 8,496,701.00	0	$ -	0	$ -	0	$ -
MONROE	0	$ -	0	$ -	12	$ 3,933,797.00	0	$ -	0	$ -	0	$ -
MORGAN	0	$ -	0	$ -	15	$ 7,945,308.00	0	$ -	0	$ -	0	$ -
MUSKINGUM	0	$ -	0	$ -	36	$ 14,169,875.00	0	$ -	0	$ -	0	$ -
NOBLE	0	$ -	0	$ -	32	$ 65,273,143.00	0	$ -	0	$ -	0	$ -
PERRY	0	$ -	0	$ -	9	$ 7,167,121.00	0	$ -	0	$ -	0	$ -
PIKE	0	$ -	0	$ -	10	$ 7,756,112.00	2	$ 887,600.00	0	$ -	0	$ -
ROSS	0	$ -	20	$ 16,922,739.00	13	$ 10,351,796.00	96	$ 483,523,985.00	0	$ -	0	$ -
SCIOTO	2	$ 193,331.00	1	$ 456,000.00	63	$ 477,785,655.00	0	$ -	0	$ -	0	$ -
TRUMBULL	1	$ 61,323.00	2	$ 383,945.00	66	$ 96,587,303.00	0	$ -	0	$ -	0	$ -
TUSCARAWAS	0	$ -	0	$ -	54	$ 50,576,265.00	0	$ -	0	$ -	0	$ -
VINTON	0	$ -	0	$ -	19	$ 14,102,427.00	0	$ -	0	$ -	0	$ -
WASHINGTON	0	$ -	1	$ 563,590.00	49	$ 36,135,410.00	0	$ -	0	$ -	0	$ -
Grand Total	**12**	**$ 3,590,465.00**	**53**	**$ 64,097,405.00**	**992**	**$ 1,331,388,913.00**	**174**	**$ 539,721,898.00**	**1**	**$ 346,092.00**	**0**	**$ -**