Wildland Fire Protection Plan 2020-2022
Dixie Power
July 1, 2020

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Dixie Power is a non-profit rural electric cooperative, originally established under the United States Department of Agriculture (USDA) Rural Electrification Act (REA) in 1946, and currently serves approximately 25,000 customers in the southwest corner of Utah, in Washington and Iron counties, and the northwest corner of Arizona, in Mohave county.

Dixie Power is headquartered in Beryl, Utah, with additional offices in Bloomington and Bloomington Hills in St. George, Utah, and in Beaver Dam, Arizona.

The management team of Dixie Power consists of:

LaDel Laub, Chief Executive Officer, ladell@dixiepower.com
Colin Jack, PE, Chief Operating Officer, colinj@dixiepower.com
Chery Hulet, Chief Financial Officer, cheryh@dixiepower.com

The official mailing address of the cooperative is:

71 East Highway 56
Beryl, Utah 84714

The phone number for any or all of the offices is: 435-439-5311

Dixie Power serves suburban and rural residential, agricultural, commercial, and light industrial customers in the communities of Newcastle, Modena, Pine Valley, St George, Washington, Hurricane, Beaver Dam, and Scenic. See Map 1, Land Ownership, in Appendix B. To serve these customers Dixie Power has:

County, State	Customers	Acres	Miles of transmission	Substations	Miles of OH distribution	Miles of UG Distribution
Iron, UT	880	759,839	33	7	228	32
Washington, UT	20,622	235,310	117	19	154	506
Mohave, AZ	2,699	272,477	24	2	109	25
TOTALS	24,201	1,267,626	174	28	491	563

The Mission Statement of Dixie Power is:

"Building Trust by equitably serving our members and communities with safe, reliable, affordable energy."

Everything Dixie Power does is to meet the mission detailed in that statement.

"Success depends upon previous preparation, and without such preparation there is sure to be failure." Confucius

The purpose of the analysis and practices detailed in this Wildland Fire Protection Plan is to:

1. Protect the public.
2. Minimize the chance of the cooperative's powerlines starting wildfires.
3. Speed the recovery from any wildfires that may occur.

The plan contained in the following document has been drafted to comply with the requirements specified in Utah Code 54-24-203 and has been reviewed by the pertinent agencies, with input from all interested parties, has been reviewed by a third party expert, and duly adopted by the Board of Directors of Dixie Power, all of which has been documented in the body of the plan. A Glossary of Terms, specific to this industry and used throughout this plan is included in Appendix A.

Parts (a) through (h) [in bold, following] are the specific items covered in this Wildland Fire Protection Plan and have been extracted directly from the text of Utah Code 54-24-203. The paragraphs following each point have been drafted to address each of the requirements of the legislation.

All sections in this plan will be regularly updated and modified as needed, depending on experience. As a minimum, this plan will be reviewed annually and the findings presented to the cooperative's Board of Directors (Governing Authority,) and updated every three years with new assessments and to incorporate new technology and current best practices.

(a) Description of areas within the service territory of the electric cooperative that may be subject to a heightened risk of wildland fire;

Dixie Power has had a direct experience with wildfire, back in June 2017, when the "North Fire" of unknown origin burned down a one-mile segment of Dixie Power's overhead (OH) distribution line between the communities of Newcastle and Pine Valley; no dwellings or lives were lost in the wildfire, but electrical service was lost to the community of Pine Valley for thirty hours. Based on this experience, Dixie Power considers the line between Newcastle and Pine Valley to be of high risk. Since the occurrence of the North Fire, Dixie Power has completely replaced eight miles of OH line, the oldest section of the line, with the worst access, and which was completely closed off to the cooperative crews for the entire decade preceding the fire, of the approximately 25-mile overhead line, with new poles, crossarms, insulators, and wire, and shortened up the span lengths and opened up better access, all of which should reduce the risk of future wildfires on that line.

In addition to this one OH powerline in which Dixie Power experienced the direct effects of a wildfire, the cooperative has evaluated each of its powerlines (feeders) relative to the risk of starting a wildland fire. This analysis process started with overlaying the cooperative's Geographical Information System (GIS,) which maps all the powerlines owned and operated by the cooperative, over the Fire Threat Index and Fire Risk Index GIS maintained by the Utah Division of Natural Resources (DNR) in their Utah Wildfire Risk Assessment Portal, UWRAP, (see: https://wildfirerisk.utah.gov/.)

Note: The “Fire Threat” includes fuels, vegetation, terrain, and available fire suppression; UWRAP defines: “Wildfire Threat is a number that is closely related to the likelihood of an acre burning and is displayed in the Utah WRA by the Fire Threat Index. The Fire Threat Index combines the probability of an acre igniting (Fire Occurrence Density), the expected final fire size based on rate of spread in four weather percentile categories and the effectiveness of fire suppression resources. Since all areas in Utah have Fire Threat Index (FTI) calculated consistently, it allows for comparison and ordination of areas across the entire state. For example, a high threat area in Eastern Utah is equivalent to a high threat area in Western Utah.” “Fire Risk” aggregates the Threat with the effects, or monetary values associated with the fires (homes, structures, etc.); UWRAP defines: “Wildfire Risk represents the possibility of loss or harm occurring from a wildfire and is displayed in the Utah WRA by the Fire Risk Index. Wildfire Risk combines the likelihood of a fire occurring (Threat), with those areas of most concern that are adversely impacted by fire (Fire Effects), to derive a single overall measure called the Wildfire Risk Index. It identifies areas with the greatest potential impacts from a wildfire considering the likelihood of an area burning and the impacts to values and assets aggregated together. Since all areas in Utah have the Wildfire Risk Index calculated consistently, it allows for comparison and ordination of areas across the entire state.”

The resulting composite maps for all the powerlines owned and operated by Dixie Power are found in Appendix C (Fire Threat Index Areas) and Appendix D (Fire Risk Index Areas.) The overhead powerlines are drawn in blue in the composite maps and the underground powerlines are drawn in green. The areas of high fire threat index and high fire risk index are colored in red and orange, so the areas of interest are where the blue lines cross the orange and red areas. The overhead lines are a greater potential threat in a wildfire situation than underground lines because bare overhead wires are largely supported in open air on wooden poles and could be exposed to fire and lightning; underground lines are practically uninvolved in a wildfire situation because they’re buried four feet under the surface level of the ground.

In reviewing other wildfire information found in the UWRAP portal, there is information on the Land Ownership or Management, Surface Fuels/Vegetation, as well as the Historical Fire Occurrence Density. Those three maps are shown in the Appendix B. On the first of those three maps, it can be seen that the preponderance of the area in the Dixie Power service territory is BLM (yellow,) U.S. Forest Service (green,) Utah State Trust Lands (blue,) with some private (white;) most of the powerlines are actually located in the white (private land) area. On the second of those three maps, the Surface Fuels, it can be seen that preponderance of surface fuels in the Dixie Power territory are: short, sparse, dry climate grass, i.e. exotic herbs (pink area;) moderate load, dry climate grass-shrub, i.e. Desert Scrub/Steppe (yellow area;) and some high load, humid climate grass-shrub, i.e. Pinyon-Juniper (orange area.) In the third of those three maps, the Historical Fire Occurrence Density, it can be seen that the majority of the fires in Washington and Iron counties have been located around the urban and suburban areas of Washington County and up the I-15 corridor and around the town of Pine Valley. For this very reason, the first two projects specified in this plan are around and in the town of Pine Valley.

Using the composite GIS, each of the Dixie Power feeders were individually analyzed for risk of wildfire; the results of the analysis are displayed in the tables below. In the first column on the left is the name and map location of the substation. The second column gives the feeder number and the third column contains a description of the feeder, including a map reference number; each feeder starts at the substation and then extends out to the end of the line. The fourth column contains the

description of the fire risk analysis for that feeder, including map reference numbers, and addresses fire risk levels as well as any projects required to reduce the threat of powerline-caused wildfires.

Escalante Valley (Beryl) Area Substations and Feeders			
Substation	Feeder	Description	Analysis
Austin Sub (Beryl Area Map B5)	181	OH South To Hwy 56 (Beryl Area Map B5 and B2)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk. The one area of concern includes the two segments on the southwest portion of this feeder where the OH line leaves irrigated land, near Highway 56 (see map B5 & B2.) The first 5.2-mile segment (181-1) of three-phase line has old poles and old conductor and so is scheduled for replacement in 2025. The second segment (181-2) is approximately 2 miles long with some three and single-phase line with old poles and conductor and is scheduled to be replaced in 2026.
	182	OH West to Modena (Beryl Area Map B5, B2, and B1)	This feeder crosses a lot of area with red and orange risk level and so requires a fair amount of detailed evaluation. The first segment of this feeder, going west, (map B5) has good, new poles with good ACSR conductor. Continuing west on this feeder (map B2) there are segments with old poles and old conductor that are slated for rebuild on the dates indicated in the following list for each segment: - 182-1: 3.5 miles in 2032 - 182-2: 4.1 miles in 2031 - 182-3: 1.75 miles in 2027 - 182-4: 3 miles in 2028 - 182-5: 8.1 miles in 2030 - 182-6: 13.3 miles in 2029 Continuing south west past the town of Modena (map B1) there is a segment of line that is new, with new poles and conductor (2015) and so is considered to be of low threat for starting a wildfire.
	183	OH North (Beryl Area Map B5, B3, and B4)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
	184	OH East (Beryl Area Map B5)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
Bar V Sub (Beryl Area Map B7)	131	OH West (Beryl Area Map B7 and B5)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk. At the very southern end of the feeder (map B7) it enters a red zone, where the line has new poles and conductor and so poses very little

			wildland fire risk. And, at the north western edge of the feeder, along Highway 56, (map B5) it crosses a red zone, and since this 6-mile segment (131-1) has old poles and old conductor it is scheduled to be replaced in 2024.
	132	Underbuild North to Hwy 56 (Beryl Area Map B7 and B5)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
	134	UG East (Beryl Area Map B7)	Entirely underground feeder
Bowler Sub (Beryl Area Map B5)	162	34.5kV South to Mine Sub (Beryl Area Map B5)	This 2-mile 34.5kV transmission line (segment 162-1) goes south to the Mine Sub (map B5,) crosses an orange zone, has old poles and is scheduled for replacement in 2034.
	163	34.5kV North to Austin Sub (Beryl Area Map B5)	This 34.5kV transmission line goes north to the Austin Sub, crosses mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
Crossroads Sub (Beryl Area Map B5)	142	OH East Hwy 56 (Beryl Area Map B5)	This feeder partly serves irrigated, cultivated land (marked in green on the maps) which poses very negligible fire risk.
	143	OH West Hwy 56 (Beryl Area Map B5)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk. The far western segment of this feeder (map B5) that enters an orange zone is new (2003,) with new poles and wire, and so poses very negligible risk of starting a wildfire.
	144	OH North Hwy 18 (Beryl Area Map B5)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
Mine Sub (Beryl Area Map B5)	201	OH West (Beryl Area Map B5)	This feeder serves completely cleared ground around the old defunct silver mine, which is colored in white on the map, and so poses very negligible fire risk.
Moyle Sub (Beryl Area Map B6)	110	138kV to Moyle SW	Entirely contained within sub site
	111	unused	unused
	112	34.5kV to Crossroads Sub (Beryl Area Map B6 and B5)	This 34.5kV transmission line passes through irrigated, cultivated land (marked in green on the maps) which poses very negligible fire risk. However, in the middle of the line (segment 112-1) it crosses a red zone, and since this 6.1-mile line segment has old poles and conductor it is scheduled to be replaced in 2033.
	113	34.5kV to Pinto/Pine Valley (Beryl Area Map B6 and B8)	This 34.5kV feeder crosses red and orange zones but has new poles and wire, except for a short 2.4-mile segment, the Reber and Ence taps to the east, which includes two short pieces (segment 113-1 on map B8)

			both of which have old poles and wire and so are scheduled to be replaced in 2023.
	114	34.5 kV To Newcastle (Beryl Area Map B6)	This 34.5kV transmission line passes entirely within the cleared ground inside the town of Newcastle, which is colored in white on the map, and so poses very negligible fire risk.
Moyle SW (Beryl Area Map B6)	101	138kV to Bowler Sub (Beryl Area Map B6 and B5)	This 138kV transmission line passes through irrigated, cultivated land (marked in green on the maps) which poses very negligible fire risk. However, in the middle of the line it crosses a red zone, but since this line has newer poles and conductor it poses negligible fire risk.
New Castle Sub (Beryl Area Map B6)	123	3Ø OH Newcastle North (Beryl Area Map B6)	The first and last segments of this feeder cross mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk. However, there is a middle 7.1-mile segment (123-1) of this feeder (map B6) that crosses an orange zone and which has old poles and wire and so is scheduled to be replaced in 2032.
	124	OH Newcastle West - Hwy 56 (Beryl Area Map B6)	This feeder serves mostly irrigated, cultivated land (marked in green on the maps) and so poses very negligible fire risk.
	125	OH Newcastle East (Beryl Area Map B6)	This feeder does not leave the substation. It is a backup to feeder 124.
Pine Valley Sub (Beryl Area Map B9)	321	OH South/Pine Valley Town (Beryl Area Map B9)	This feeder lies entirely within the town of Pine Valley (map B9) and so poses little risk of wildfire even though it is colored in red. Even so, the 3.1-mile segment (321-1) at the far east side of town has old poles which are scheduled to be replaced in 2021.
Pinto (Beryl Area Map B8)	301	South to Pine Valley (Beryl Area Map B8 and B9)	This feeder crosses red and orange zones but has new poles and wire, except for a short 2.2-mile segment (301-1,) at the end of the Grass Valley tap to the east (map B9,) which has old poles and wire and so is scheduled to be replaced in 2022.

Dixie and Arizona Area Substations and Feeders			
Substation	Feeder	Description	Analysis
Atkinville Substation (Dixie Area Map D3)	631	Transmission underbuild North & South (map D3)	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line.
	632	UG to Desert Color	Entirely underground feeder (map D3)
	633	UG to Auburn Hills	Entirely underground feeder (map D3)
	63 Bus 1	63T1 Bus (15kV)	Entirely contained within sub site
	63T1	63T1 Breaker (69kV)	Entirely contained within sub site
Atkinville	621	69kV To Beaver Dam	New (2011) transmission line with large (1272MCM)

Switch Yard (Dixie Area Map D3)		Substation (maps D3, D2, and D1)	ACSR conductor supported on composite fiber and resin poles and transmission insulators.
Beaver Dam Sub (in AZ)	721	OH Underbuild to Littlefield	Relatively new ACSR conductor supported on wood transmission poles, underbuilding the transmission line.
	722	OH to Desert Springs	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	723	OH to Beaver Dam	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	724	UG North to Pioneer Rd	Entirely underground feeder
Bloomington Hills Sub (Dixie Area Map D3)	541	OH East 2800 South	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line. Normally open emergency backfeed.
	542	OH West River Road	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line.
	543	UG to Hills South	Entirely underground feeder
	544	UG to Hills North	Entirely underground feeder
	545	UG to Hills North	Entirely underground feeder
	546	UG to Hills South	Entirely underground feeder
	547	UG Tie line to Lytle Sub	Entirely underground feeder. Normally open emergency backfeed.
Bloomington Sub (Dixie Area Map D3)	561	OH South to South Bloomington	New large (397MCM) ACSR conductor supported on wood transmission poles, underbuilding the transmission line.
	562	UG to Man o' War Rd	Entirely underground feeder
	564	Underbuild to River Road	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line.
	566	OH North to Wal-Mart	New large (397MCM) ACSR conductor supported on relatively new wood poles. There is one OH line segment that passes through a red zone as it crosses the Virgin River (see Dixie High Threat map 1) and that is also with large ACSR conductor and relatively new poles (1987.)
Bloomington Sub Line (Dixie Area map D3)	561-1	Port of Entry Recloser	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	561-2	Gypsum Mine Recloser (Feeds Seegmiller Mtn)	New OH distribution line in the State of AZ with wood poles and ACSR conductor.
Church Farm Sub (Dixie Area Map D3)	505	69kV to Quail Creek Hydro (Dixie Area map D3 and D4.)	The first half of this line, starting at the substation (map D3,) is a new transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators. The second half of this transmission line, ending at the

			Quail Creek Hydro (map D4,) in Hurricane, is older (mid-1980's,) with wood poles and 4/0 AWG ACSR and will be replaced in 2021.
	571	South on 3000 (1450 South Backup)	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	572	North Along 3000 East, West Side of Rd.	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	573	OH East on 1140 South	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	574	1450 South Underbuild Stone Cliff/River Hollow	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	575	North to Pine View Estates	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	576	UG East on 1140 South	Entirely underground feeder
Church Farm Sw. Yard (Dixie Area Map D3)	501-502	138kV Millcreek Generation	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators. There is one segment that passes through a red zone as it crosses the Virgin River (see Dixie High Threat map 3) and that is also with large ACSR conductor and steel poles (2005) and so poses negligible fire risk.
	501-503	138kV St George Sub	New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators. There are two segments that pass through orange/red zones, as it crosses the Desert Tortoise Reserve and then the Virgin River (see Dixie High Threat map 3) and those are also with large ACSR conductor and steel poles (2002) and so poses negligible fire risk.
	502-503	138kV Fort Pierce Sub	New (2002) transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators crosses only green and white areas on the map and so poses negligible fire risk.
Dixie Springs Sub (Dixie Area Map D4)	511	OH West	This feeder has a mix of overhead OH and UG distribution lines serving largely irrigated landscaped or irrigated cultivated rural areas inside the City of Hurricane and around the Sand Hollow Reservoir. The wildfire risk levels are determined to be relatively low, colored from green to tan.
	512	OH East	This feeder has a mix of overhead OH and UG

			distribution lines serving largely irrigated landscaped or irrigated cultivated rural areas inside the City of Hurricane and around the Sand Hollow Reservoir. The wildfire risk levels are determined to be relatively low, colored from green to tan.
	513	UG to SH Pump Station	Entirely underground feeder that never leaves the fenced area.
	514	OH South to Dixie Springs	This feeder is almost entirely underground and feeds the irrigated, landscaped subdivision of Dixie Springs and so poses a negligible risk of wildfire.
Fort Pierce Sub (Dixie Area Map D3)	551	OH North River Road Underbuild	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line, and so poses negligible fire risk.
	552	Commerce/N. River Rd & 3850 S.	This is a relatively new OH feeder with wood poles and ACSR conductor that serves in an industrial park where the properties are either cleared of vegetation or landscaped and so there is a low risk of wildfire.
	553	OH East to Armory	This is a relatively new OH feeder mostly underbuilt on the steel poles of the transmission line and with large ACSR conductor that serves in an industrial park where the properties are either cleared of vegetation or landscaped and so there is a low risk of wildfire.
	554	West Enterprise Dr.	This is a relatively new OH feeder with wood poles and ACSR conductor that serves in an industrial park where the properties are either cleared of vegetation or landscaped and so there is a low risk of wildfire.
	555	UG East to Old Dominion	Entirely underground feeder
	556	OH South River Road	New large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line and so poses negligible fire risk.
	555-1	OH To Airport	This is a relatively new OH distribution line with wood poles and ACSR conductor that was built in recent years to serve the new airport and crosses terrain colored yellow on the threat map so it poses little wildfire risk.
	69-551	69kV River Road East to Breaker 505	New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	69-552	69kV River Road West to Bloomington	New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	69-553		New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and

			transmission insulators and so poses negligible fire risk.
	69-554	69kV East to WB & DS Subs	New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	69-BT	69kV Bus Tie Breaker	Entirely contained within sub site
	69-CS3	69kV CS3 Cap Bank	Entirely contained within sub site
	69-CS4	69kV CS4 Cap Bank	Entirely contained within sub site
	69-CS5	55T4 20 MVA Transformer	Entirely contained within sub site
	69-CS6	55T3 20 MVA Transformer	Entirely contained within sub site
Hughes Bench Line (in AZ)	703-1	Las Vegas Way South	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	703-2	Las Vegas Way West	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
Hughes Bench Sub (in AZ)	701	OH to Desert Skies RV	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	703	OH to Scenic	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
	704	OH to Hughes Bench	Relatively new OH distribution line in the State of AZ with wood poles and ACSR conductor.
Lytle Substation (Dixie Area Map D3)	641	UG North to St James	Entirely underground feeder
	642	UG North to Pintura	Entirely underground feeder
	643	UG East to 2800 South	Entirely underground feeder
	644	UG North to Condos	Entirely underground feeder
	64 Bus 1	64T1 Bus (15kV)	Entirely contained within sub site
	64T1	64T1 Breaker (69kV)	New transmission line with large (795MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
Majestic View Sub (Dixie Area Map D3)	6005	60T1 Breaker (69 kV)	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6006	60T2 Breaker (69 kV)	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6009	Majestic View 69 kV Bus	Entirely contained within sub site
	6010	Church Farm 69 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire

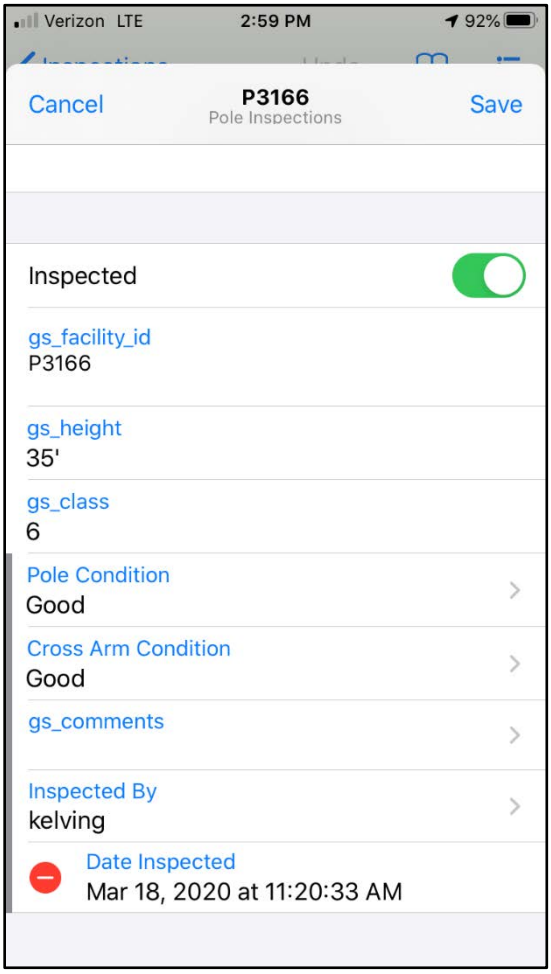
			risk.
	6011	Dixie Springs 69 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6012	North Bus 7.2 MVAR Cap Bank	Entirely contained within sub site
	6013	Fort Pierce 69 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6015	South Bus 7.2 MVAR Cap Bank	Entirely contained within sub site
	6001 & 6002	Church Farm 138 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6001 & 6003	Purgatory Flat 138 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
	6001 & 6003	Majestic North Bus	Entirely contained within sub site
	6002 & 6004	Majestic South Bus	Entirely contained within sub site
	6003 & 6004	Fort Pierce 138 kV Line	New transmission line with large (1272MCM) ACSR conductor supported on steel transmission poles and transmission insulators and so poses negligible fire risk.
Seegmiller Sub (Dixie Area Map D3)	591	3000 East Underbuild North to W.F. Sub	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	592	3000 East Underbuild South	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	593	West to 2450 South Overhead	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	594	UG South to Crimson Ridge East	Entirely underground feeder
	595	UG South to Crimson Ridge West	Entirely underground feeder
	596	UG West to Little Valley Road	Entirely underground feeder
	59-15-BT	15kV Bus Tie	Entirely contained within sub site

Sun River Sub (Dixie Area Map D3)	581	UG West to Ironwood	Entirely underground feeder
	582	UG South to SR	Entirely underground feeder
	583	Bloomington Tie	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	584	UG West to the Enclave	Entirely underground feeder
	586	UG to Underbuild to Bloomington	This feeder starts with new large (397MCM) ACSR conductor supported on steel transmission poles, underbuilding the transmission line, where it crosses a red zone as the line crosses the Virgin River (see Dixie High Threat Areas map 1) and then goes mostly underground through Bloomington Country Club, except west of the waste water plant where it goes overhead with new (2000) poles and ACSR conductor and so poses negligible fire risk.
Washington Bench Sub (Dixie Area Map D3)	531	Empty - Moved Load	Unused
	532	OH South Washington Fields Road	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	533	OH North to Indian Knolls	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	534	OH East Washington Dam Road	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	535	UG East Washington Dam Road	This feeder leaves the substation underground and then goes overhead along the Washington Dam Road, crossing a red zone that has a relatively low fire danger because it's a landscaped area, then crosses the Virgin River and enters another red zone (see Dixie High Treat Area map 4.) The OH lines through that orange/red zone are relatively new (2009) with new poles and ACSR, and so should pose little risk of fire.
	536	OH West to Indian Oaks	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
Washington Fields Sub (Dixie Area Map D3)	522	OH East to Stucki Farm	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	523	OH South Transmission Underbuild	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.
	524	OH 1450 South to River Road	This feeder serves mostly irrigated, landscaped property (marked in white on the maps) and so poses very negligible fire risk.

(b) Description of the procedures, standards, and time frames that the electric cooperative will use to inspect and operate its infrastructure;

Dixie Power has followed the Rural Utilities Services (RUS, successor to the REA) standards for 75 years for powerline construction and operation, including line inspection and maintenance, which has kept the cooperative's powerlines almost completely uninvolved in wildland fires. These standards were developed by the RUS/USDA staff and/or their consultants and have applied to REA/RUS cooperatives since the original Rural Electrification Act of 1935 and are evaluated and updated regularly and more recently have been codified in the Code of Federal Regulations (CFR.) Specifically, see: "**REA Bulletin 161-3 Inspection and Maintenance of Distribution Lines**" requiring regular cooperative system inspections and testing, and which has been codified in 7CFR1793.21.

The field inspectors at Dixie Power are all linemen and so are very familiar with the construction standards and how the lines should look and therefore are readily capable to spot any anomalies. They utilize smart devices (iPads or smart phones) that have powerline inspection software directly tied to the cooperative's GIS. The image below is a screen shot of the Pole Inspection Form from the smart device of a field inspector.



When a problem is detected via line or ROW inspection, the inspector creates a service order in the digital service order system, which is tied to the inspection software which is tied to the GIS, and the dedicated line maintenance crew finds it automatically added to their project queue. Of course, higher priority is assigned to projects that affect safety (including the potential to start fires) and near-term reliability. The inspections are also tracked in the cooperative's GIS software so that inspections do not overlap and so that segments of the powerlines are not overlooked. These inspections and resulting service orders are on-going and a permanent and ever-increasing part of every annual budget.

In addition to the minimum regulatory requirements from the RUS via the CFR, Dixie Power also follows the National Rural Electric Cooperative Association's (NRECA) more rigorous Rural Electrification Safety Accreditation Program (RESAP) and has been accredited for safety by NRECA since 2006. This accreditation is renewed every three years after an extensive application and rigorous on-site inspection program. See Appendix E for the inspection rubric: "Section 17: Overhead & Underground Lines, Equipment, etc." Under this program Dixie Power has inspected and will continue to inspect, on an annual basis:

10% of all poles
33% of all pad mounted transformers
33% of all overhead lines
20% of all rights-of-way (ROW)

The progress of all system inspections is reported each month to the Dixie Power Board of Directors in their monthly board meeting.

Further, in addition to the preventive measures from on-going line inspections and maintenance, the cooperative employs SCADA (Supervisory, Control, And Data Acquisition) system monitoring of each feeder on a 24/7 basis. Through the cooperative's SCADA system, dispatchers can monitor the current and voltage readings and device operations on every substation feeder on the whole system. It has been the cooperative's experience that the SCADA system and dispatcher can detect and respond to and operate feeder devices and manage line faults sometimes in less than five minutes, and usually before the first customers can call on the phone. For permanent faults that require a line crew to respond, the SCADA dispatcher typically has the crew on the way before the first member phone calls arrive.

(c) Description of the procedures and standards that the electric cooperative will use to perform vegetation management;

Trees and tall brush cause a large proportion of the outages experienced by any overhead electric system. They also cause intermittent and recurring outages, observed as blinking and brown outs (voltage sags,) which decreases customer satisfaction. It is incumbent upon the cooperative to maintain cleared rights-of-way to maintain reliability and customer satisfaction, in addition to any wildland fire protection benefits. That Dixie Power has been successful in maintaining cleared rights-of-way is evidenced by the year-after-year gold standard reliability percentage of 99.99% as calculated in accordance with IEEE standards and on-going customer satisfaction ratings by the American Customer Satisfaction Index (ASCI) always between 88 and 90. To appreciate how high

these customer satisfaction scores are relative to any other company, see: https://www.theacsi.org/.

Dixie Power has followed the RUS standards for almost 75 years for powerline construction and operation, including vegetation management. See **REA Bulletin 161-17** for prescribed on-going vegetation control practices for right-of-way maintenance for cooperatives. These standards were developed by the RUS/USDA staff and have applied to REA/RUS cooperatives since the original Rural Electrification Act of 1935 and are evaluated and updated regularly and have been codified in the CFR. For a drawing of the Right-of-Way clearing and maintenance required of and by cooperatives, see 7 CFR Part 1728, "**RUS Bulletin 1828F-804**, Section M: Specifications for Right-of-Way Clearing for overhead distribution lines." Also see 7CFR 1728, "**RUS Bulletin 1828F-810 & 811**" for similar transmission line ROW clearing standards. See Appendix F of this document for the text and drawings of both the overhead distribution line and the transmission line vegetation management standards.

To assure continuously cleared rights-of-way Dixie Power requires access to rights-of-way from all landowners and land managers, including public and private (see Map of Land Ownership in Appendix B.) Both safety and reliability suffer when Dixie Power is unable to access their powerlines due to access closed by landowners and land managers, and so Dixie continually requests the required access to all their powerlines. Dixie Power contracts with a certified tree trimming contractor who follows a set cycle of the overhead lines to ensure that all trees are the prescribed distance away from the powerlines (see prescribed distances detailed in Appendix F.) Additionally, if any of the cooperative line or ROW inspectors, or any member of the public, report that a segment of powerline has encroaching trees, a service order is created and a corresponding work order is issued to the tree trimming contractor in addition to their normal trimming cycle. Vegetation management is a permanent and ever-expanding part of every annual budget.

In addition to regular tree trimming and ROW clearing by a licensed, qualified, contractor, Dixie Power sends out individual linemen to each line fuse pole in known high-risk/dried grass locations (see the red dots on the Fire Risk maps in Appendix D) to clear out the brush or any other potential fire hazard manually. Note: this does not include transformer fuses on overhead lines, which are very small and are of a different characteristic, which expel significantly less hot gas, and therefore are much less likely to be involved in any wildland fire events. This specific and targeted round of clearing is done each year in late April/early May, depending on the weather and precipitation. For a detailed explanation of how expulsion fuses function, see Expulsion Fuse in Appendix A.

Also, cooperative-owned properties that need to be completely clear of all vegetation, specifically substations and material yards, are sprayed annually on a pre-scheduled basis by a licensed, qualified contractor. The regular, annual application of herbicides on these areas meant to stay clear of all vegetation ensures that they indeed stay free of any combustible vegetable material. By keeping all substations clear of flammable vegetation, it has been observed that small wildland fires stop at the edge of the gravel skirt, typically ten feet out from each substation fence or wall. See photo following of a wildland fire that burned up to the edge of a substation gravel skirt near the Utah/Arizona border in June 2020.

Furthermore, Dixie Power follows the REA/RUS design and construction standards as detailed in RUS bulletins and codified in the CFR. These design and construction standards are regularly reviewed and updated by RUS and/or their consultants and have as a fundamental design criteria public safety and fire prevention. By following the RUS design and construction standards, as well as a regular on-going line replacement program, Dixie Power has created an electrical system that is not only 99.99% reliable, as previously mentioned, but also safe, as evidenced by a longer than seven year record of no lost time accidents and a very low Workers' Compensation Fund (WCF) experience modifier (e-mod) rate around 60%.

(d) Description of proposed modifications or upgrades to facilities and preventative programs that the electric cooperative will implement to reduce the risk of its electric facilities initiating a wildland fire;

Dixie Power has specified, purchased, and installed special fuses to replace the standard expulsion fuses on the line taps on the high-risk OH distribution line, specifically between Newcastle and Pine Valley as detailed above. The new fuse type is Eaton's Cooper Power series ELF current-limiting dropout fuses and is designed to eliminate any potential for sparking from the expulsion of hot gases in the operation of normal expulsion fuse links. See again Expulsion Fuse in Appendix A. These ELF fuses are relatively new, expensive, and in short supply with long lead times greater than one

year due to very high demand from California, so they were deployed on one high-risk line segment as an experiment to determine their effectiveness. To date there have been no wildfires known to have been started by the expulsion of hot gasses from ordinary fuse links on the Dixie Power system, but these new ELF fuses have been deployed in the area designated by experience as having a higher than average risk of wildfire out of an overabundance of caution.

Additionally, Dixie Power has been working to rebuild and improve the OH distribution lines throughout the Escalante Valley, where the majority of Dixie Power's OH distribution lines are found, at the rate of at least five miles per year for the past ten years, and will continue each year into the future. In these rebuild/upgrade projects all of the existing wood poles have been replaced with new, larger wood poles (specifically 35 foot-class 5 and 40 foot-class 4,) new crossarms and insulators, with shorter spans between poles (reducing from greater than 500 foot spans to less than 400 foot spans,) and new, larger, more sturdy conductor (replacing old 8A-CWC and #6 copper with new 1/0 AWG ACSR or larger,) all of which should combine to make each new segment not only more reliable, but also much more resilient and less likely to fail in extreme weather events, which should directly increase public safety and reduce the potential to start wildfires in those areas. Failing powerlines due to broken poles, crossarms, or wires have the potential to cause sparks if the energized parts come in contact with the ground, and longer spans can lead to lines slapping together in the wind which also has the potential to cause sparks, so everything that the power company can do to prevent the mechanical failure of powerlines not only improves safety and reliability, but also minimizes the risk of initiating a wildland fire.

In the Dixie area of the Dixie Power service territory, the cooperative has been removing OH distribution lines and replacing them with UG lines which are naturally less susceptible to cause or be damaged in the case of wildfires. This conversion from overhead to underground has been occurring as a natural consequence of development, as formerly rural agricultural areas around the cities of St George, Washington, and Hurricane are being subdivided into suburban residential areas and the new subdivisions choose to install underground lines for aesthetic reasons even though overhead is easier and less expensive for the cooperative to operate and maintain. To-date this conversion has resulted in a shift from 10:1 overhead to underground to a 1:4 overhead to underground distribution line ratio.

Substations, with their vegetation-free gravel yards (to protect against step and touch potentials during fault events,) are necessarily at low risk for initiating wildfires due to their lack of vegetation/fuel to sustain a fire. Additionally, as illustrated in the previous section, substation gravel yards extend ten feet out from all substation walls and fences, which helps prevent small wildland fires from entering the substation yard and involving the equipment located there.

See also Appendix G: Wildland Fire Prevention/Response Procedure for other preemptive measures.

(e) Description of procedures for de-energizing power lines and disabling reclosers to mitigate potential wildland fires, taking into consideration:

(i) the ability of the electric cooperative to reasonably access the proposed power line to be de-energized;

(ii) the balance of the risk of wildland fire with the need for continued supply of electricity to a community; and

(iii) any potential impact to public safety, first responders, and health and communication infrastructure;

Dixie Power maintains in its customer database all members who rely on electricity for life-saving medical devices. However, Dixie Power can't guarantee an uninterrupted supply of electricity to its members, no matter how hard we try, and so recommends that members who require an uninterrupted power supply install their own extra equipment to meet their particular needs. Having the electricity turned off for any reason, planned or unplanned, runs contrary to the cooperative's Mission Statement to provide reliable power. Even so, Dixie Power considered de-energizing OH distribution powerlines in the red or orange zones in the Wildland Fire Risk maps during the windy, hot, dry summer months as an option to reduce the risk of starting any wildland fires. However, due to the radial nature inherent in the rural distribution and transmission lines of rural electric cooperative service territories, that action would put whole communities out of service for prolonged periods of time, which would impact the public safety, first responder, and health and communication infrastructure, and inevitably lead to the deaths in those communities of those who are vulnerable and who rely on electrical service for medical devices and air conditioning in the summer, as tragically witnessed in the pre-emptive outages in California in the summer of 2019.

"Radial" powerlines are those that feed an area with electricity from only one direction and have no backfeed potential built in. For example, the community of Pine Valley, in the north of Washington County, is fed with a single OH distribution line from the community of Newcastle, in the south of Iron County. After the North Fire of 2017, the possibility to extend an alternate feed from the community of Central (four miles to the west of Pine Valley) was seriously studied and rights-of-way between the two communities were explored. At that time it was determined that, if the interconnection with the neighboring utility (Rocky Mountain Power) could be accomplished, the line extension project costs calculated would be so high per resident of Pine Valley that the director elected to Dixie Power's board by the residents of Pine Valley made the motion to cancel the project study. This is a typical situation in long rural powerlines. Urban and suburban powerlines are typically fed in loops rather than radially, and so can be backfed in most emergency outage situations.

Given the inherently radial nature of rural powerlines illustrated above, and the necessity of maintaining the supply of electricity to communities, especially during the hot, dry summer months, and the impacts that losing electrical service has on public safety, first responders, and health and communications infrastructure, it is critical that Dixie Power be allowed access to all of their powerline rights-of-way, by all property owners and managers, both private and public. The cooperative must be allowed to operate, maintain, and clear vegetation to provide safe, reliable, and affordable electricity to all communities, and especially the vulnerable populations of those communities.

To make its system more reliable, Dixie Power has installed reclosers and circuit breakers around its OH distribution system so that when faults occur the outage can be minimized and isolated. Dixie Power also considered as an option to prevent wildland fires putting all reclosers and circuit breakers on non-reclose settings to ensure that the power would go off and stay off in the case of any short circuit during the windy, hot, dry summer months. However, due to the radial nature inherent in the rural distribution and transmission lines of rural electric cooperative service territories, such action would put whole communities out of service for prolonged periods of time, which would inevitably lead to the deaths in those communities of those who are vulnerable and who rely on electrical service for medical devices and air conditioning in the summer, as witnessed graphically in the pre-emptive outages in California in the summer of 2019.

Industry-wide experience has been that 70-80% of all faults are temporary in nature (see: Cooper Power System's "*Electrical Distribution System Protection*" 2005 edition, page7) and that electrical service could be restored within seconds of interrupting the arc, which is the normal practice of almost all power companies in the United States. Thanks in large part to this practice of properly setting the recloser functions as part of a greater sectionalizing coordination scheme, as well as the vegetation management, and the design, construction, maintenance, and inspection practices described in the preceding sections, Dixie Power customers have enjoyed a 99.99% average reliability for over twenty years, on which they have rightfully come to expect and rely.

Even in light of the above analysis, and out of an overabundance of caution, in response to any sustained outage during the "dry summer months" of June through the end of September (or until the monsoon season, which often starts in July) operations crews will not replace and re-energize blown fuses until they have driven the line downstream from the fuse to ensure that there are no conductors on the ground or among any dry vegetation and thus avoid starting a wildland fire. Also, after any line recloser locks out, the line crew will try the recloser only once before driving the length of the circuit for the same reasons. See Appendix G: Wildland Fire Prevention/Response Procedure.

(f) Description of the procedures the electric cooperative intends to use to restore its electrical system in the event of a wildland fire;

If a wildfire were to destroy a segment of Dixie Power's lines, as in the case of the North Fire in 2017, Dixie Power crews would await clearance from the fire incident commander and when the clearance was given the crews would immediately start reconstructing the damaged lines, upgrading the line as necessary. See: **RUS Bulletin 1730B-2 Guide for Electric System Emergency Restoration Plan** currently posted on-line in the Code of Federal Regulations. Dixie Power maintains a crew of linemen on-call 24/7 and can call in as many other linemen as needed in an emergency. Currently Dixie Power employs 30 linemen and an engineering staff of five, and so can respond to an emergency with the personnel required to rebuild powerlines after a disaster. In the case of the 2017 North Fire, power was restored to the community of Pine Valley within thirty hours. Additionally, Dixie Power has a mutual aid agreement in place with the other cooperatives in the Utah Rural Electric Cooperative Association and would have emergency access to additional personnel and equipment, as needed.

Dixie Power maintains a level of material inventory such that a five-mile section of overhead distribution line could be built at any time. Additionally, Dixie has a material supply alliance with

Western United Electric supply, and they can bring in more material as needed from their stock in Denver, Colorado overnight. Dixie Power only utilizes, and Western United only stocks, materials approved by RUS; this means that large quantities could be brought to bear from any other cooperative material supplier anywhere in the country. This cooperative material supply chain is often brought to bear after tornados and hurricanes and ice storms in the parts of the country where those events are prone to happen.

Dixie Power maintains a very active presence on social media and energetically strives to keep its members notified during any outage or other interruption to the service of electricity. Dixie Power also runs continual radio ads to keep members informed of activities or other issues that affect the delivery of their power. Additionally, each member has access to a web-based map that shows all on-going outages on the Dixie Power system so they can determine whether or not they're affected and see an estimate of when the power should be restored.

The following replacement costs are used as Dixie Power evaluates the wildfire risk to its facilities:

- OH 1-phase 1/0AWG ACSR distribution line: $45,000 per mile
- OH 3-phase 1/0AWG ACSR distribution line: $65,000 per mile
- OH 3-phase 397MCM ACSR distribution line: $95,000 per mile
- Distribution Substation: $2,000,000
- OH 138/69kV transmission line: $1,250,000 per mile

(g) Description of potential consultation, if applicable, with state or local wildland fire protection plans.

In preparation and compilation of this Wildland Fire Protection Plan, Dixie Power has consulted with and taken input from the individuals, documents, and resources in the following table:

Forestry, Fire and State Lands	Danon Hulet, Southwest Area Manager	435-592-0099, danonhulet@utah.gov	3/24/2020
	John Schmidt, Wildland Urban Interface Coordinator	Cell: 435-590-0353, johnschmidt@utah.gov	3/25/2020
	Adam Hyder, Fire Warden – Washington County	435-590-4715 adamheyder@utah.gov	5/12/2020
	Ryan Riddle, Fire Warden – Iron County	435-590-4714, ryanriddle@utah.gov	6/15/2020
Utah DNR	Wildfire Risk Assessment Portal	https://wildfirerisk.utah.gov/Map/Public/#map-themes	3/26/2020
	Utah Fire Information	https://utahfireinfo.gov/contacts/	5/15/2020
Bureau of Land Management, US Forest Service, National Park Service, Bureau of	Color Country Interagency Fire Center	https://gacc.nifc.gov/gbcc/dispatch/ut-cdc/about/	5/15/2020
	List of agency contacts	https://gacc.nifc.gov/gbcc/dispatch/ut-cdc/centers/index.html	5/15/2020

Indian Affairs, and the State of Utah Forestry, Fire and State Lands			
USDA US Forest Service (USFS)		https://www.fs.usda.gov/managing-land/fire/wildfirerisk	4/9/2020
	Nicholas Glidden, Pine Valley ranger	435-652-3101, cell: 435-691-0769	6/15/2020
	Kevin Greenhalgh, Dixie National Forest Fire Management Officer	435-865-3271 kevin.greenhalgh@usda.gov	6/15/2020
	Robert R Lopez	robert.r.lopez@usda.gov	6/15/2020
	Skeet Houston	skeet.houston@usda.gov	6/15/2020
PacifiCorp/RMP	Chris Spencer, System Protection	801-220-5910 Christopher.spencer@pacificorp.com	4/15/2020
Five County Association of Governments	Jason Whipple, Emergency Services Director	435-634-5734, Cell: 435-703-1431	4/13/2020
	Southwest Utah Regional Wildfire Protection Plan (RWPP)	https://digitallibrary.utah.gov/awweb/pdfopener?sid=5E9863C90C26F8013A56FDBA0D29CA64&did=31613&fl=%2Fpublications%2Fdc017099.pdf#toolbar=0	5/15/2020
Federated Rural Electric Insurance Exchange, "Federated"	Phil Irwin, President & CEO	Conference Call	4/23/2020
	Corey Parr, VP of Safety and Loss Prevention		
	Mike Mattix, VP of Reinsurance		
	Darrin Davenport, Safety Consultant	(913) 541-2993, cell: (913) 209-3656 DDavenport@federatedrural.com	5/7/2020
Washington County	Tiffany Martineau, Community Wildfire Planner	435-634-5734, Cell: 435-319-9640, Tiffany.Martineau@washco.utah.gov	5/4/2020
Iron County	George Colson, Iron County Emergency Management Coordinator	435-267-1740, https://www.ironcounty.net/contact/	5/12/2020
	Iron County's Emergency Operations Plan	https://www.ironcounty.net/department/emergency-management/	5/15/2020

(h) Consider input from:

A. The State Division of Forestry, Fire, and State Lands created in Section 65A-1-4:

The State Division of Forestry, Fire and State Lands was the very first agency that Dixie Power consulted in writing the first version of this Wildland Fire Protection Plan. A series of persons

were contacted and consulted within the agency. This plan contains their input and suggestions. See preceding table.

B. Any other appropriate federal, state, or local entity that chooses to provide input:

A series of persons working within the appropriate federal, state, county, and local entities were contacted and consulted for their input to this Wildland Fire Protection Plan. This plan contains their input and suggestions. See preceding table.

C. Other interested persons who choose to provide input:

When this document was essentially complete, and had received and incorporated recommendations from the agencies in the table above, it was posted on the cooperative's website (see: www.DixiePower.com) on June 22/2020 for public comment before being filed with the Utah Public Service Commission. All relevant input from interested persons was included in the final version that is filed with the Utah Public Service Commission.

(i) Third Party review:

Dixie Power contracted with SWCA Environmental Consultants on May 11, 2020 to provide an objective and informed Third Party Review of this document. Dixie Power received a detailed evaluation of this document on May 15, 2020 and discussed each comment individually with the consultant on May 18, 2020. All the recommended changes and additions were incorporated into the final version of this Wildland Fire Protection Plan.

(j) Date of meeting and board approval:

A substantially completed version of this plan was presented to and approved by the Dixie Power Board of Directors on May 6, 2020.

"By failing to prepare, you're preparing to fail." Benjamin Franklin

Appendix A: Glossary for Dixie Power

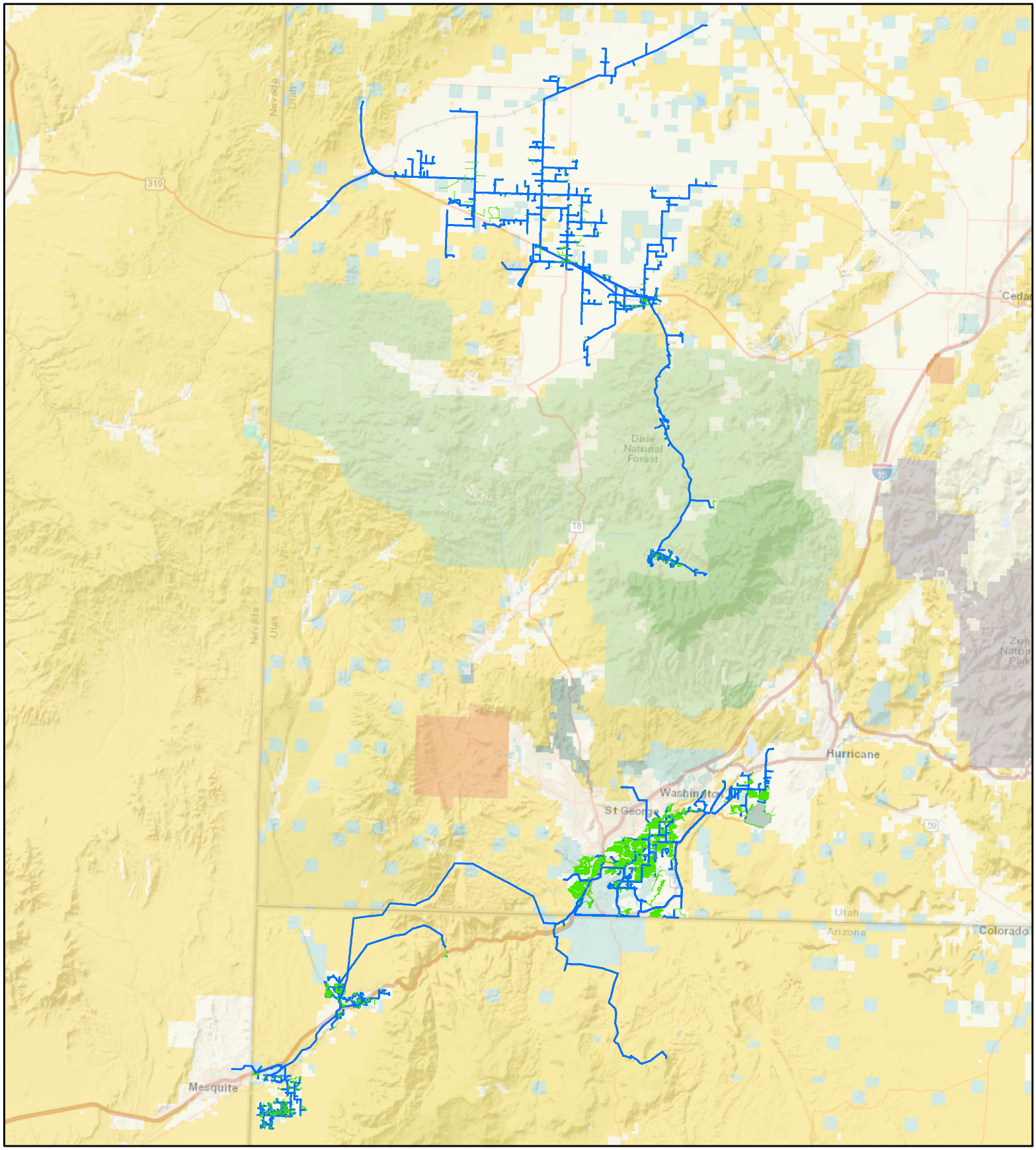
- ASCI: American Customer Satisfaction Index is a private company that surveys customers of most large companies in the Unites States to calculate their level of satisfaction and ranks those customer satisfaction scores against other companies in the same sector. See: https://www.theacsi.org/.
- ACSR: Aluminum Conductor Steel Reinforced, stranded aluminum conductor wound around a steel core, also typically stranded. The aluminum strands provide conductivity and the steel strands provide strength.
- BLM: Bureau of Land Management, federal agency tasked with managing and disposing of public lands not within parks or forests or other similar reserves.
- Board of Directors: the official Governing Authority of the cooperative, elected by the membership of the cooperative to protect the interests of the members and recognized by the State of Utah and Public Service Commission.
- E-mod: Experience Modification Factor (E-Mod) is a premium modifier that reflects the loss experience of a policyholder compared with payroll exposure during the same time period. The modifier increases or decreases the current premium depending on how the actual exposure and losses, for the past three years, compares with expected losses for the same amount of exposure.
- Expulsion Fuse: "These devices operate on the "expulsion" principle by means of a fuse link and an arc-containing tube with a deionizing fiber liner. When the fusible element of the fuse link melts, the fiber liner melts, thereby emitting deionizing gases, which accumulate within the tube. The arc is stretched, compressed, and cooled within the tube, and gas escaping at the tube ends carries away a portion of the arc-sustaining particles. Reestablishment of the arc after current zero is reached is prevented by the deionizing gases, and by extreme gas pressure and turbulence, which increase the dielectric strength of the air gap in the tube. High-pressure gases then expel arc-supporting ions remaining in the tube." *Electrical Distribution System Protection*, Cooper Power Systems, 2005, page 53
- Faults: Any time a powerline is shorted out, creating an unintentional path to ground for electrical current. The magnitude of current in faults is typically many times that of the load current.
- Federated Insurance, Federated Rural Electric Insurance Exchange: a non-profit cooperatively owned liability insurance provider that only insures rural electric cooperatives, and so understands the specific needs of this sector of the electric utility industry. Federated provides annual courtesy inspection for cooperatives to help ensure that everyone stays within prudent utility practices.
- GIS: Geographic Information System is an electronic map that contains not only drawings of systems and boundaries but also contains attributes of those boundaries and systems.
- IEEE: The Institute of Electrical and Electronics Engineers (IEEE) is a professional association for electrical engineering and has created industry accepted global standards for over a century with technical expertise and consensus of industry experts from all over the world.
- kV: kilovolt, or one thousand volts, is a measure of voltage on electrical systems. k (lower case) = one thousand and V = volts.
- MCM: Thousands (M) of Circular Mils, measurement of diameter of conductor where one mil is one one-thousandth of an inch. Used in conductor sizes for wires larger than those described in the American Wire Gauge (AWG.)
- NRECA: The National Rural Electric Cooperative Association is the organization the represents the interests of the over 900 independent non-profit member-owned electric cooperatives in the United States. NRECA provides training, group insurance and retirement benefits, as well as technical advice.

- Overhead (OH) Distribution Lines: Bare metal power wires (typically ACSR in new lines) suspended in air via poles, crossarms, and insulators. OH distribution lines are favored in rural areas because they are significantly less expensive to build, operate, and maintain. Distribution voltages for Dixie Power are mostly 12.47kV with some 34.5kV and extend from substations to the services at homes, farms, and businesses.
- Rural Electrification Administration (REA): Predecessor to the RUS, the REA is a Federal Agency, under the USDA, that was created in 1935 to provide funding, regulations, and oversight for the one thousand rural electric cooperatives that serve 80% of the land mass in the United States.
- SCADA: Supervisory, Control, and Data Acquisition is a computerized monitoring system with which a dispatcher or operator can monitor or control the power system in the field from the office or dispatch center.
- Substations: Fenced areas of approximately one acre that contain devices to change voltage from transmission levels to distribution levels, as well as regulate the voltage on the distribution lines and interrupt the flow of current on distribution lines in the case of faults. The ground in substations are sterilized and covered in clean, dry gravel.
- Three-phase: abbreviated 3Φ, typically when electrical current is carried over three separate conductors, all supported on the same pole and cross-arm.
- Transmission Lines: Bare metal power wires suspended in air via poles, crossarms, and insulators. Transmission lines carry power from the source of generation to the substations. Transmission voltages at Dixie Power are 34.5kV, 69kV, and 138kV. Transmission lines are necessarily overhead due to the level of insulation required for the higher voltages associated with transmission in order to cover longer distances.
- Underground (UG) Distribution Lines: Power wires covered in insulation and buried in the ground, typically inside conduit. UG distribution lines are significantly (five times) more expensive to build, operate, and maintain, and so are typically only used in urban or suburban area which tend to be more congested and concerned about the visual impacts from OH lines. Distribution voltages for Dixie Power are mostly 12.47kV with some 34.5kV and extend from substations to the services at homes, farms, and businesses.
- WCF: Worker's Compensation Fund of Utah provides workers compensation insurance for the work force in Utah and such has a vested interest in the safe work practices of the companies who are their customers. Premiums are set by industry and are modified for each individual company via e-mod, depending on that company's safety record.

Appendix B: Maps of Dixie Power Territory

1. Dixie Power powerlines relative to Landownership/Management
2. Dixie Power Territory relative to Vegetation Types/Fuels
3. Dixie Power Territory relative to Historical Fire Occurrence Density

DIXIE POWER - LAND OWNERSHIP



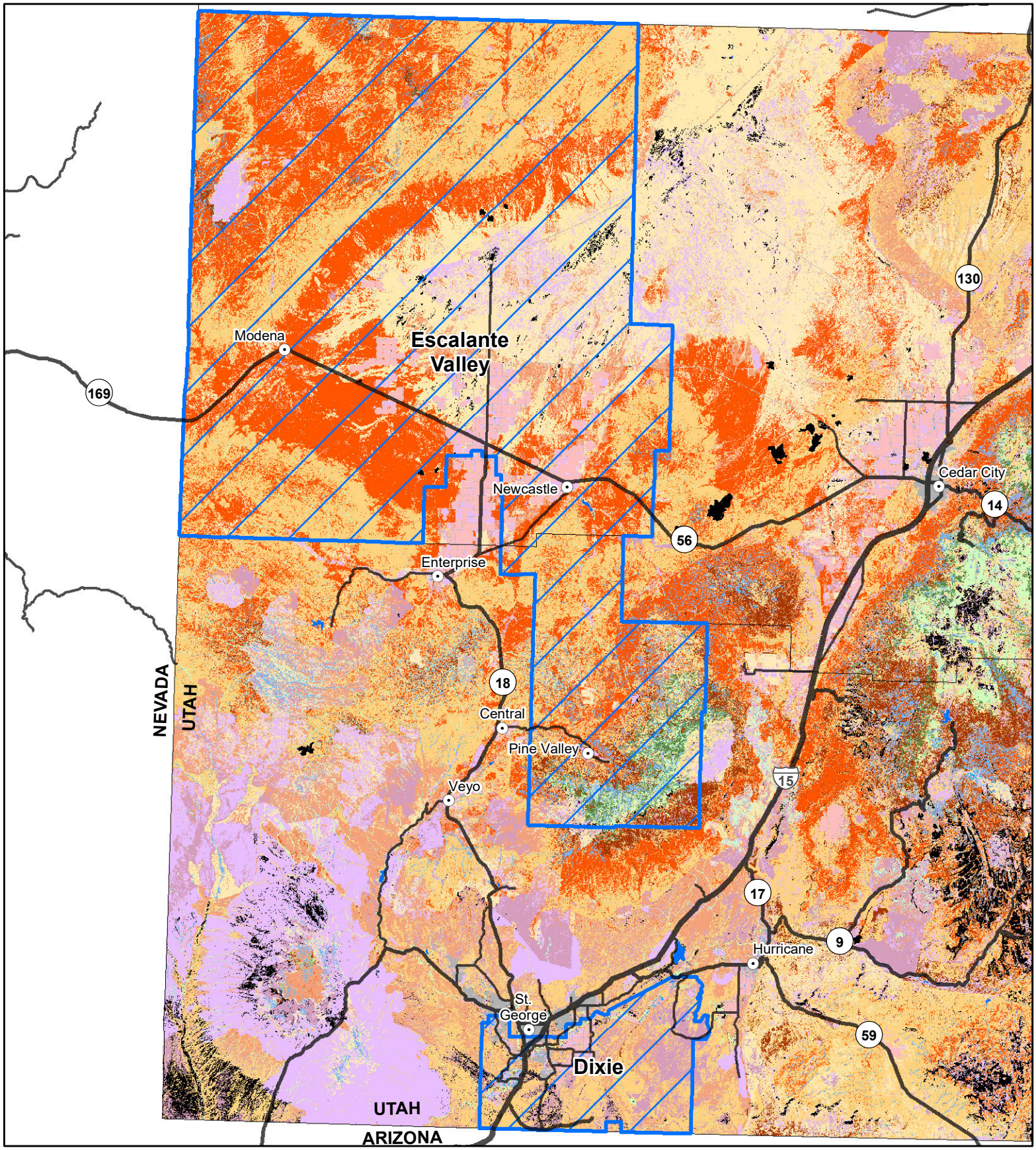
Overhead Powerline
Underground Powerline
USFS Wilderness Area
US Forest Service (USFS)
State Parks and Recreation
State
Private
National Park Service (NPS)
Military Reservations and Corps of Engineers
Indian Reservation (IR)
Bureau of Land Management (BLM)

Date: 5/18/2020

N

0 10 20 Miles

2005 FBPS FUELS MODEL SET - DIXIE POWER SERVICE AREA



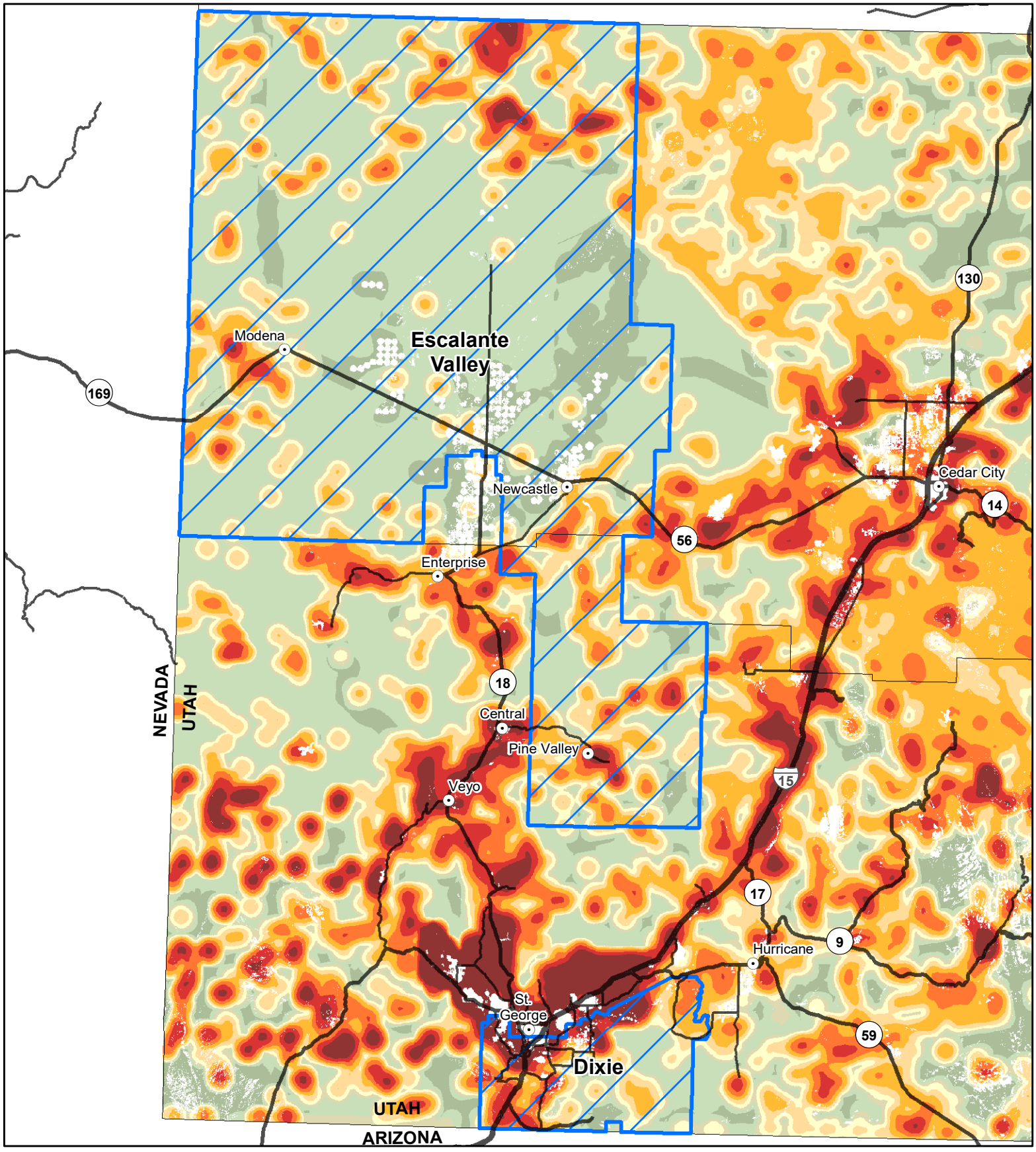
- Dixie Power Service Area
- NB01 - 91 - Urban/Developed
- NB03 - 93 - Agriculture
- NB08 - 98 - Water
- NB09 - 99 - Barren
- GR01 - 101 - Short, sparse, dry climate grass
- GR02 - 102 - Low load, dry climate grass
- GS01 - 121 - Low load, dry climate grass-shrub
- GS02 - 122 - Moderate load, dry climate grass-shrub
- SH01 - 141 - Low load, dry climate shrub
- SH02 - 142 - Moderate load, dry climate shrub
- SH05 - 145 - High load, humid climate grass-shrub
- SH06 - 146 - Low load, humid climate shrub
- SH07 - 147 - Very high load, dry climate shrub
- TU01 - 161 - Light load, dry climate timber-grass-shrub
- TU02 - 162 - Moderate load, humid climate timber-shrub
- TU03 - 163 - Moderate load, humid climate timber-grass-shrub
- TU05 - 165 - Very high load, dry climate timber-shrub
- TL01 - 181 - Low load, compact conifer litter
- TL02 - 182 - Low load, broadleaf litter
- TL03 - 183 - Moderate load, conifer litter
- TL05 - 185 - High load, conifer litter
- TL06 - 186 - Moderate load, broadleaf litter
- TL08 - 188 - Long-needle litter

N

Date: 6/12/2020

0 5 10 Miles

FIRE OCCURRENCE DENSITY - DIXIE POWER SERVICE AREA



Dixie Power Service Area

Fire Occurrence Density

- 0.000004 to 0.022435
- 0.022436 to 0.035881
- 0.035882 to 0.049010
- 0.049011 to 0.072620
- 0.072621 to 0.107858
- 0.107859 to 0.172567
- 0.172568 to 0.265480
- 0.265481 to 0.404906
- > 0.404906

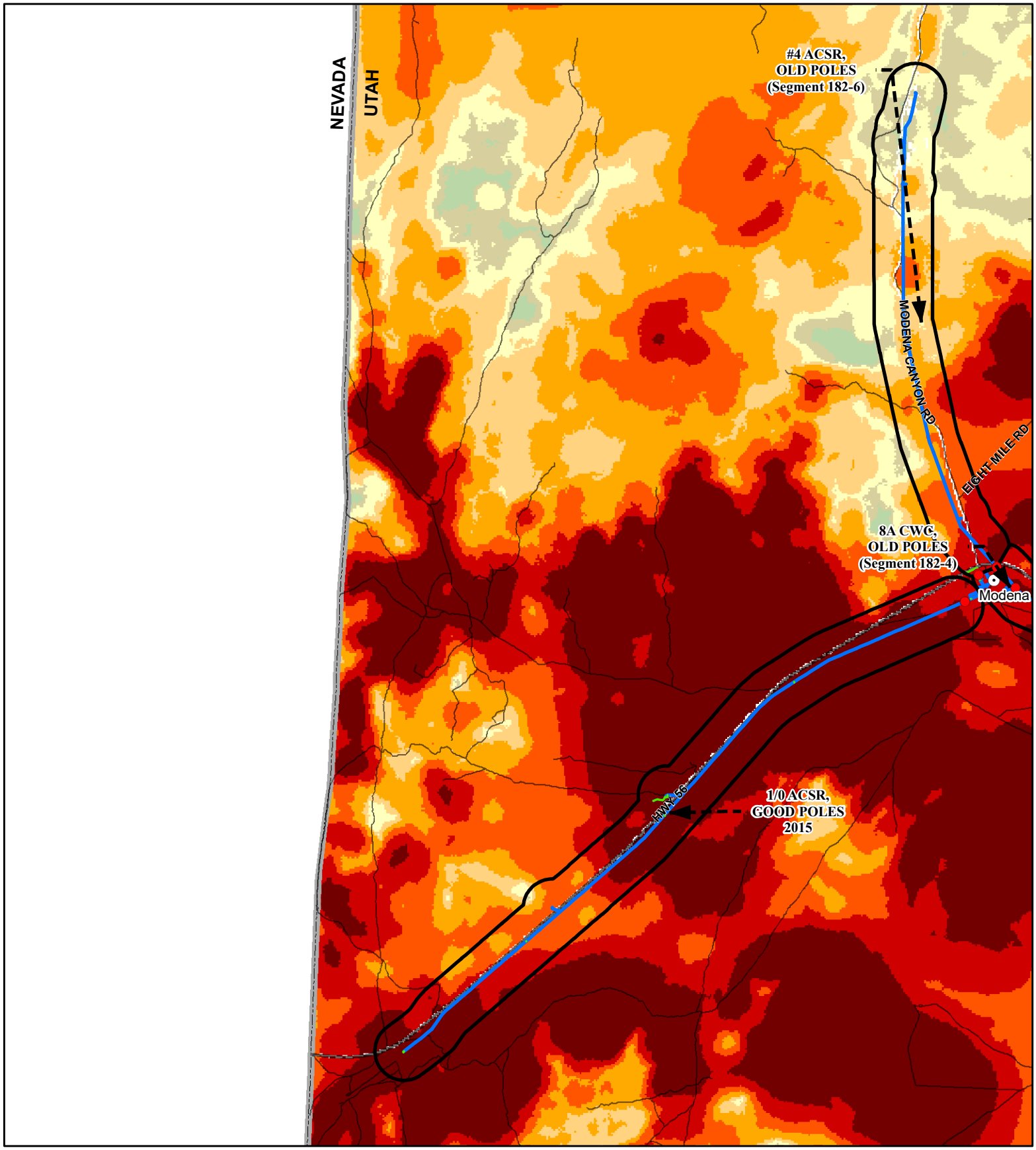
Date: 6/12/2020

0 10 20 Miles

N

Appendix C: Maps of Dixie Power's lines relative to Fire Threat Index Areas

FIRE THREAT INDEX - BERYL AREA PAGE B1



- Fuse
- Overhead Powerline
- Underground Powerline
- State Boundary
- Line Comment

Fire Threat Index

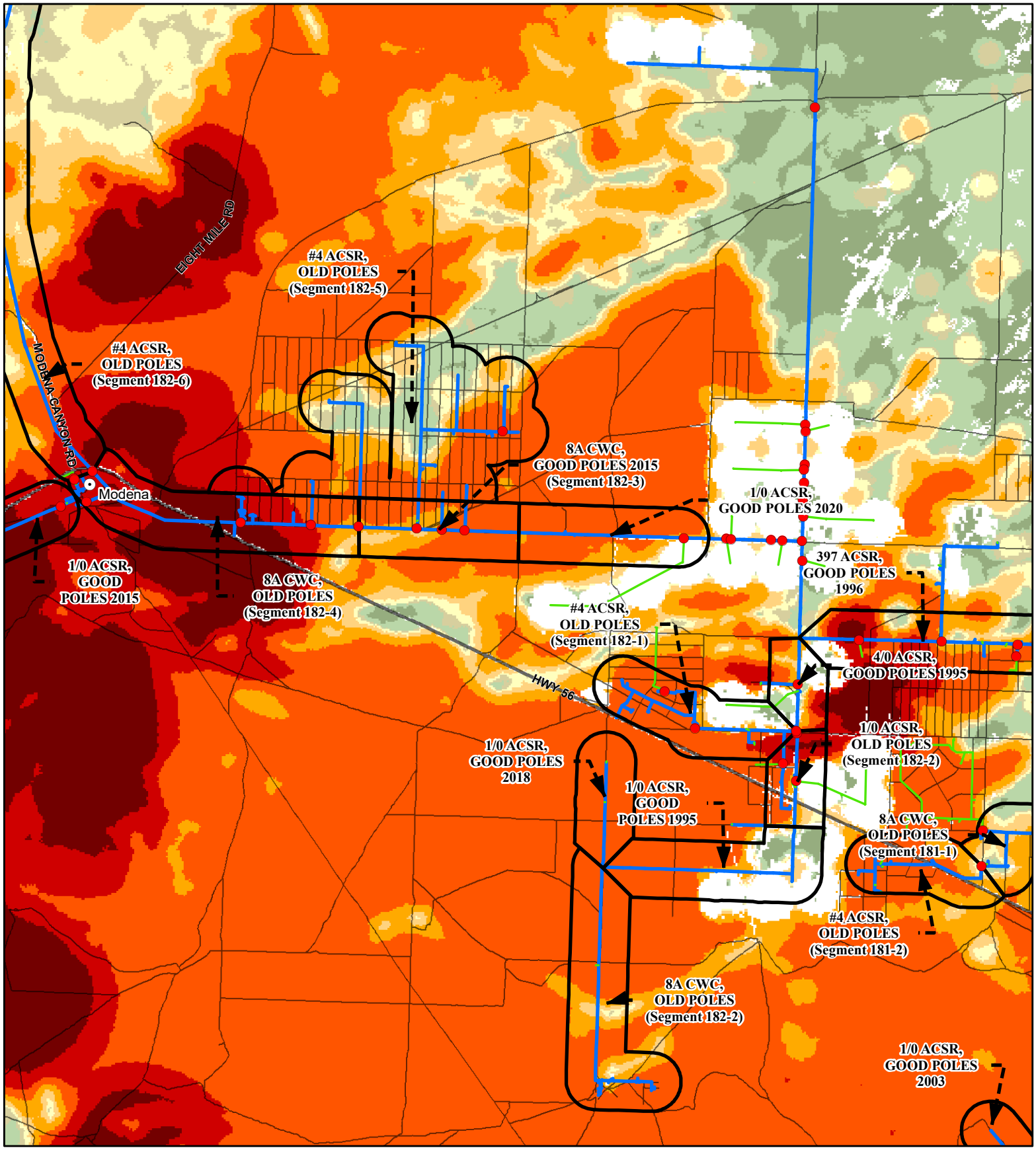
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
0.005980 to 0.011547	0.097887 to 1.000000

N

		3	4
1	2	5	6
		7	8
			9

0 1 2 Miles

FIRE THREAT INDEX - BERYL AREA PAGE B2



Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

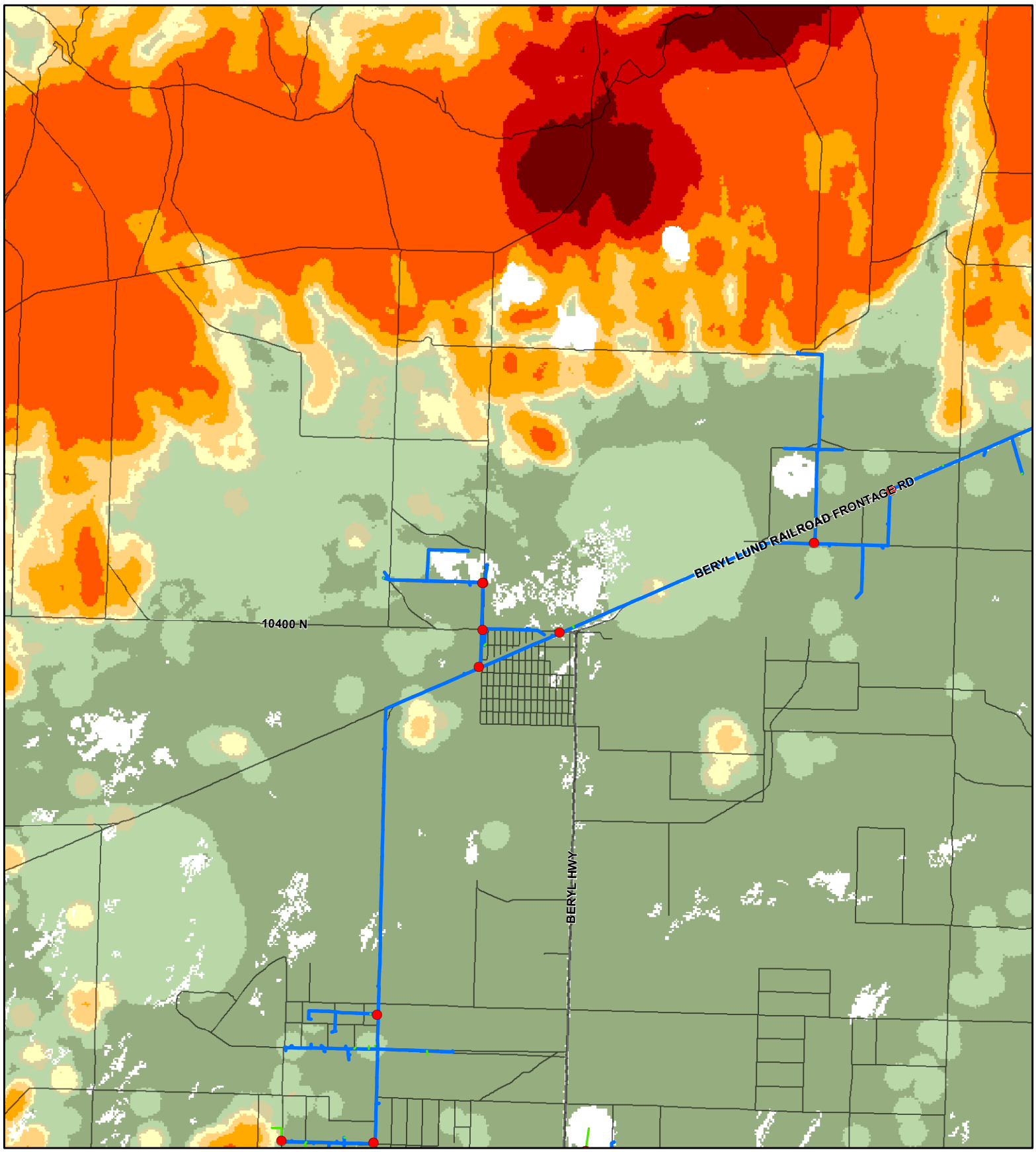
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

		3	4
1	2	5	6
		7	8
			9

0 1 2 Miles

FIRE THREAT INDEX - BERYL AREA PAGE B3



Fuse
Overhead Powerline
Underground Powerline

Fire Threat Index

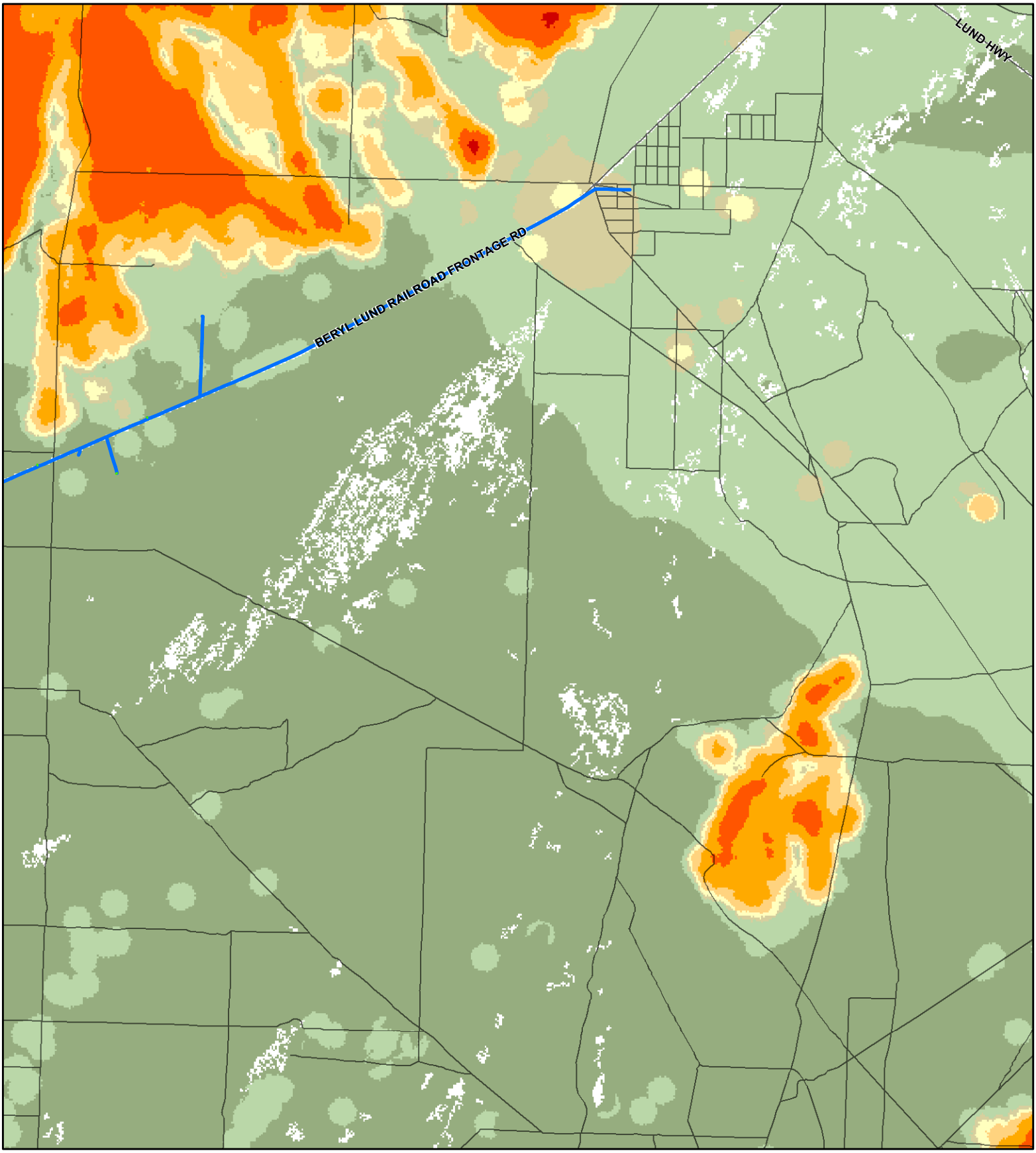
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

0 1 2 Miles

1	2	3	4
		5	6
		7	8
			9

FIRE THREAT INDEX - BERYL AREA PAGE B4



Overhead Powerline
Underground Powerline

Fire Threat Index

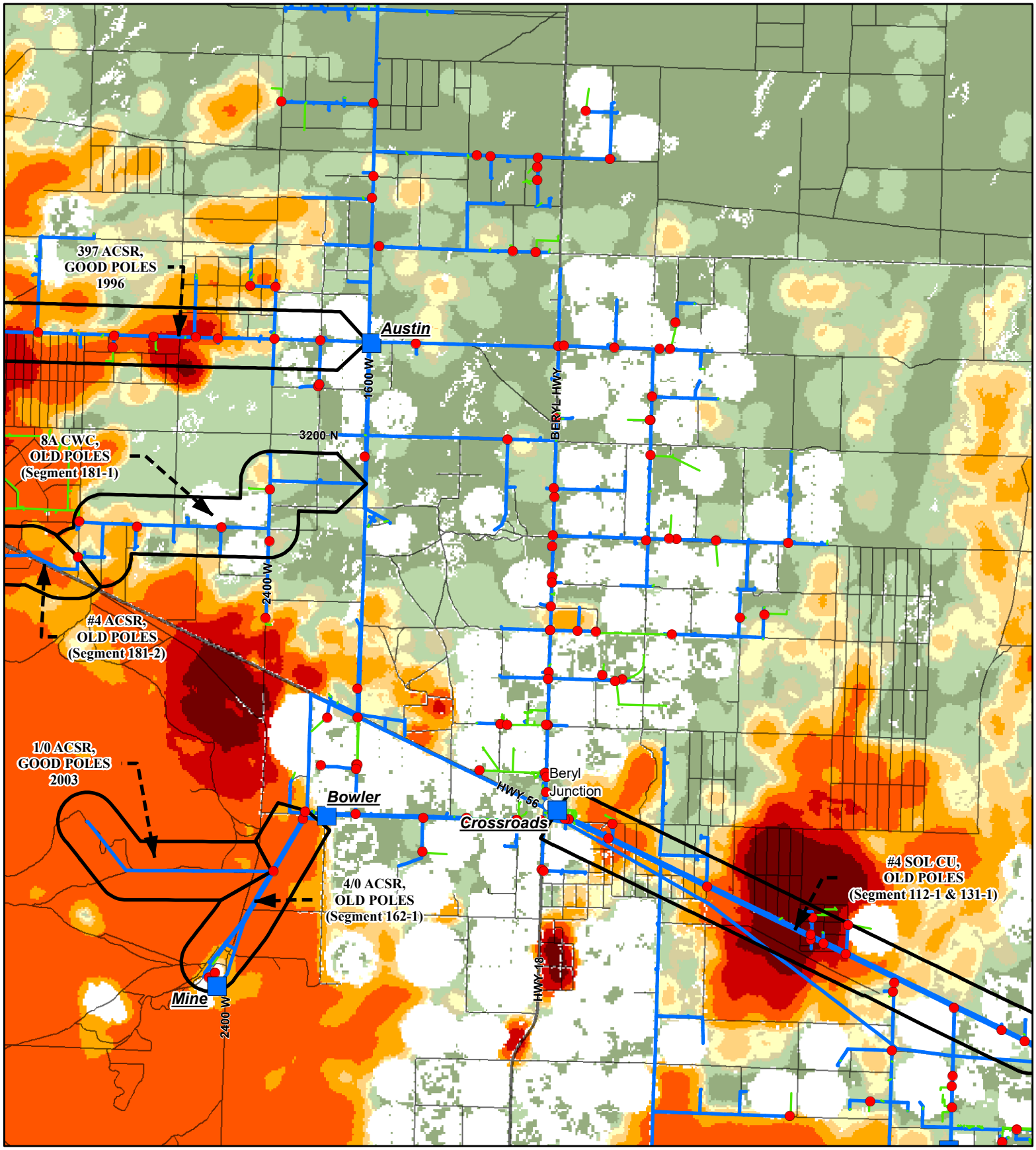
<= 0.000377
0.000378 to 0.002113
0.002114 to 0.003370
0.003371 to 0.005979
0.005980 to 0.011547
0.011548 to 0.026047
0.026048 to 0.050057
0.050058 to 0.097886

N

0 1 2 Miles

1 2 3 4 5 6 7 8 9

FIRE THREAT INDEX - BERYL AREA PAGE B5



Substation
Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

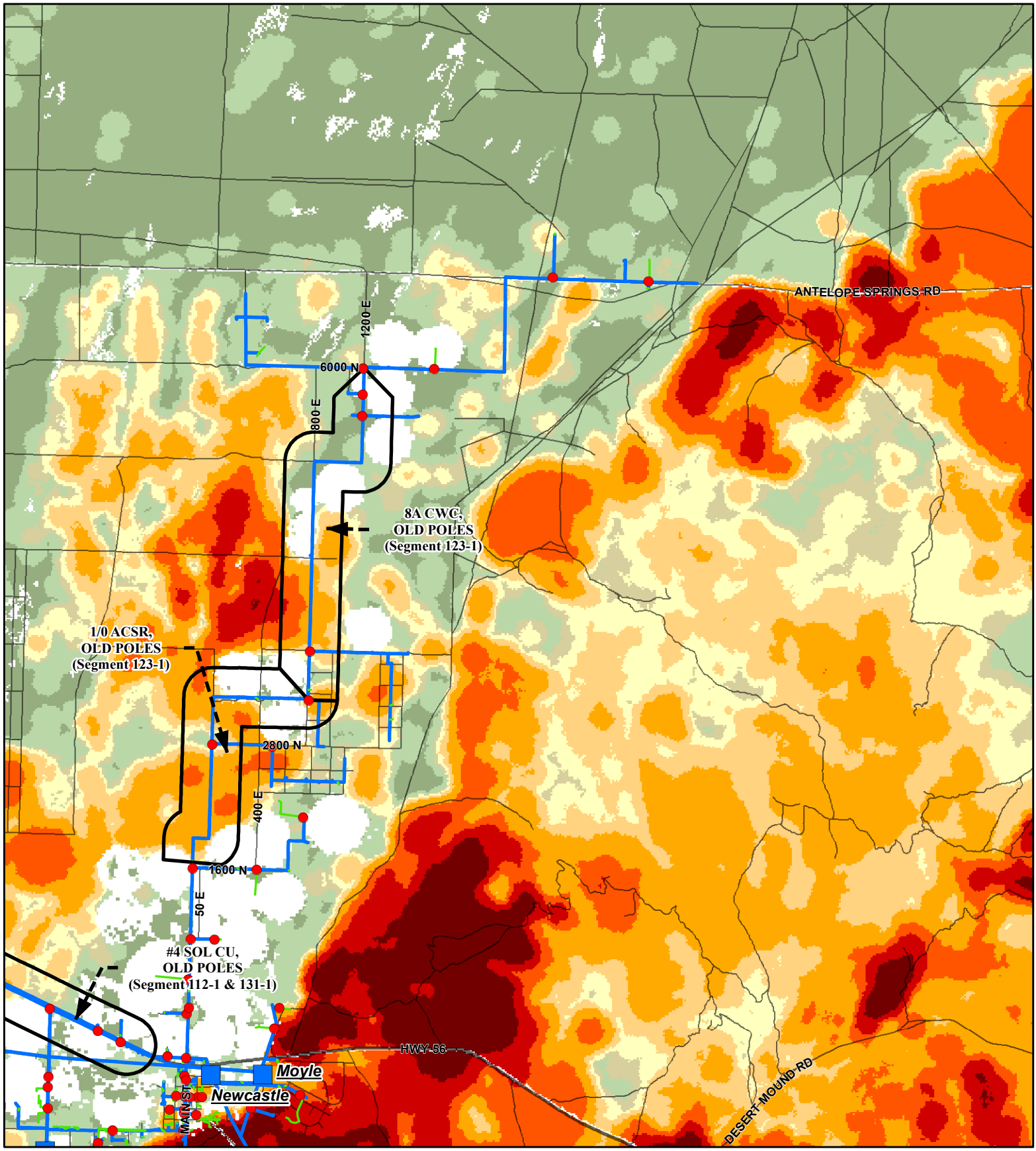
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

		3	4
1	2	5	6
		7	8
			9

0 1 2 Miles

FIRE THREAT INDEX - BERYL AREA PAGE B6



Substation
Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

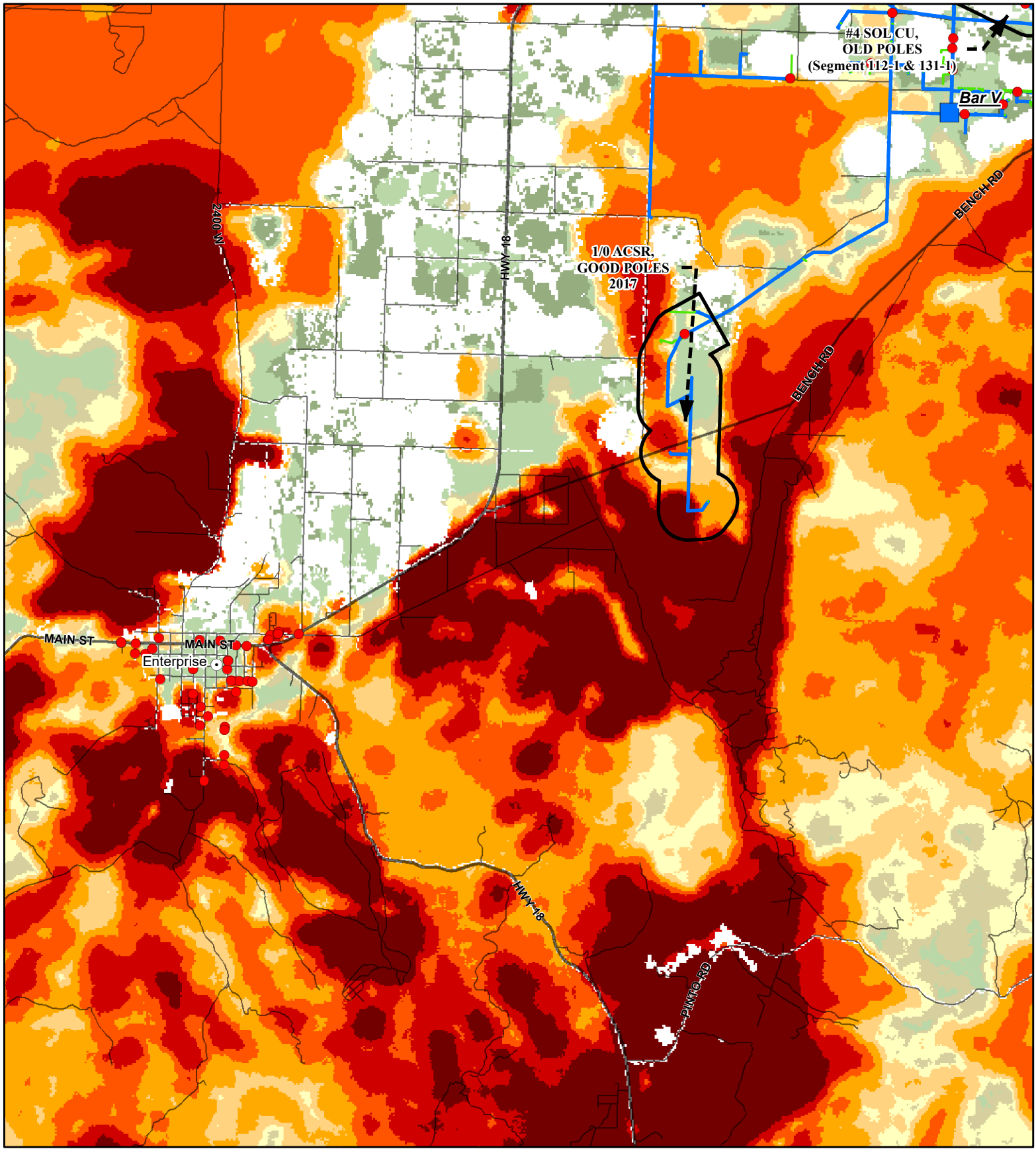
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

0 1 2 Miles

		3	4
1	2	5	6
		7	8
			9

FIRE THREAT INDEX - BERYL AREA PAGE B7



Substation
Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

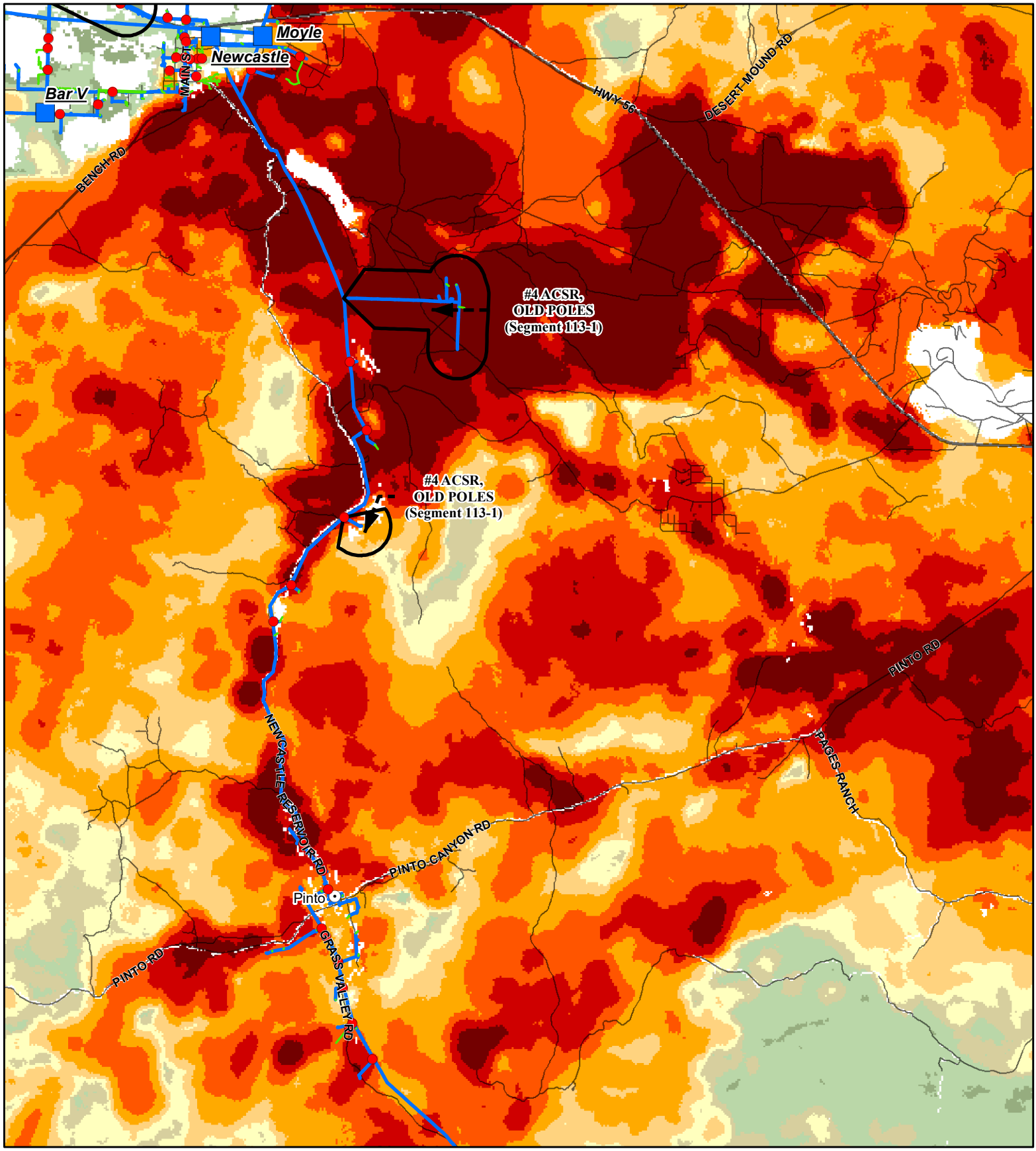
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

0 1 2 Miles

1 2 3 4 5 6 7 8 9

FIRE THREAT INDEX - BERYL AREA PAGE B8



Substation
Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

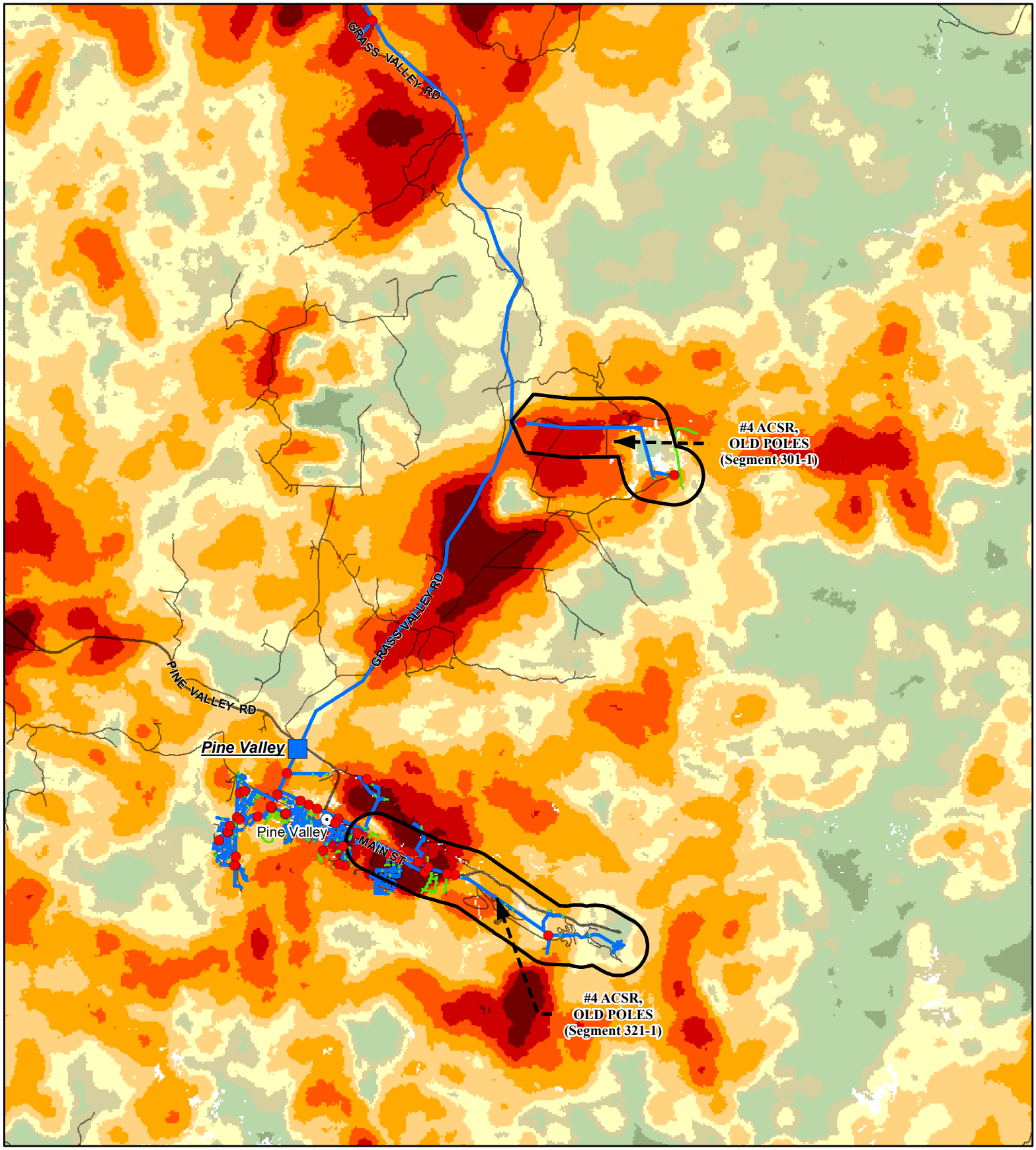
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

0 1 2 Miles

1	2	3	4
		5	6
		7	8
			9

FIRE THREAT INDEX - BERYL AREA PAGE B9



Substation
Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Threat Index

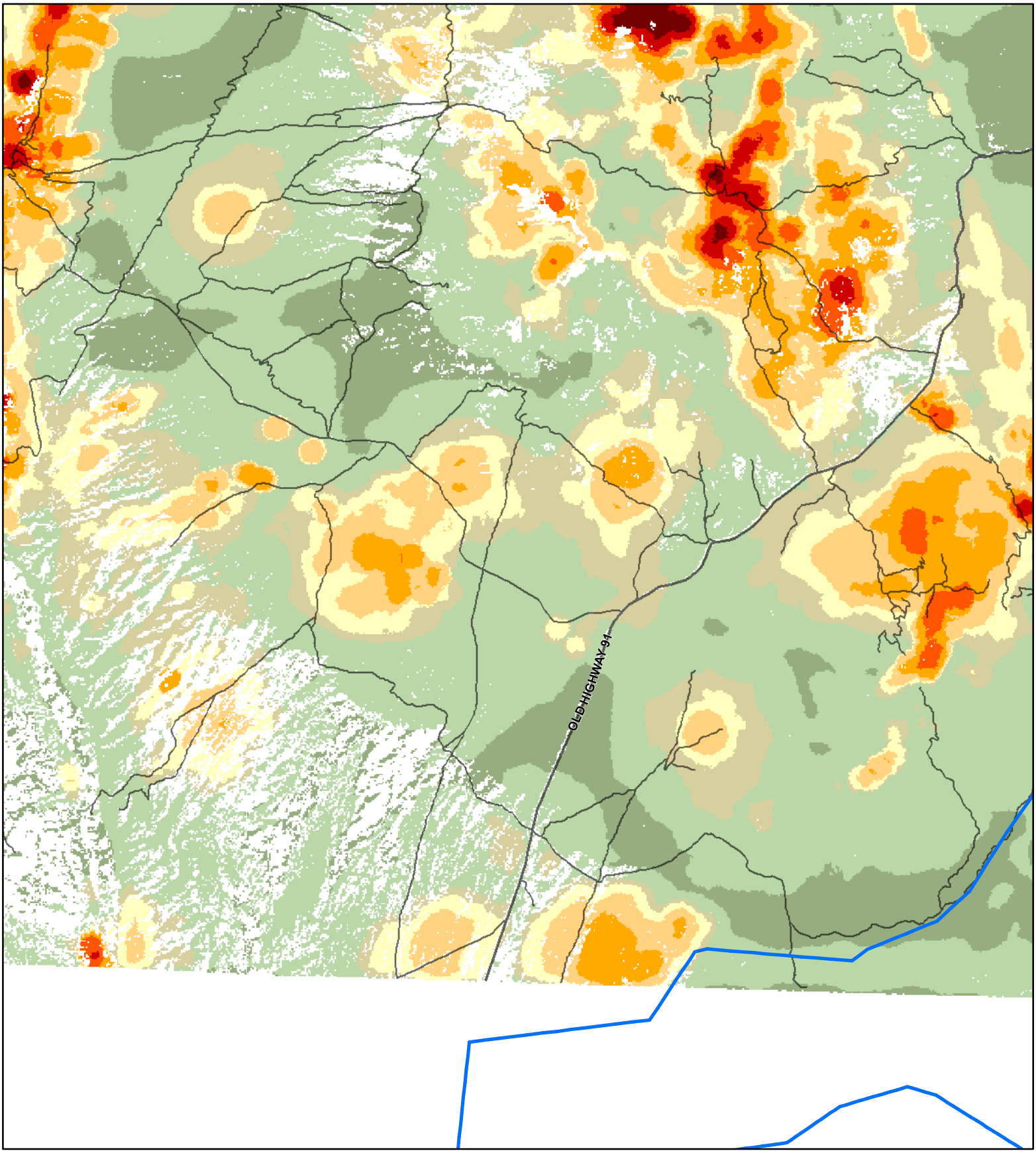
<= 0.000377	0.005980 to 0.011547
0.000378 to 0.002113	0.011548 to 0.026047
0.002114 to 0.003370	0.026048 to 0.050057
0.003371 to 0.005979	0.050058 to 0.097886
	0.097887 to 1.000000

N

0 1 2 Miles

1	2	3	4
		5	6
		7	8
			9

FIRE THREAT INDEX - DIXIE AREA PAGE D1



Overhead Powerline

Fire Threat Index

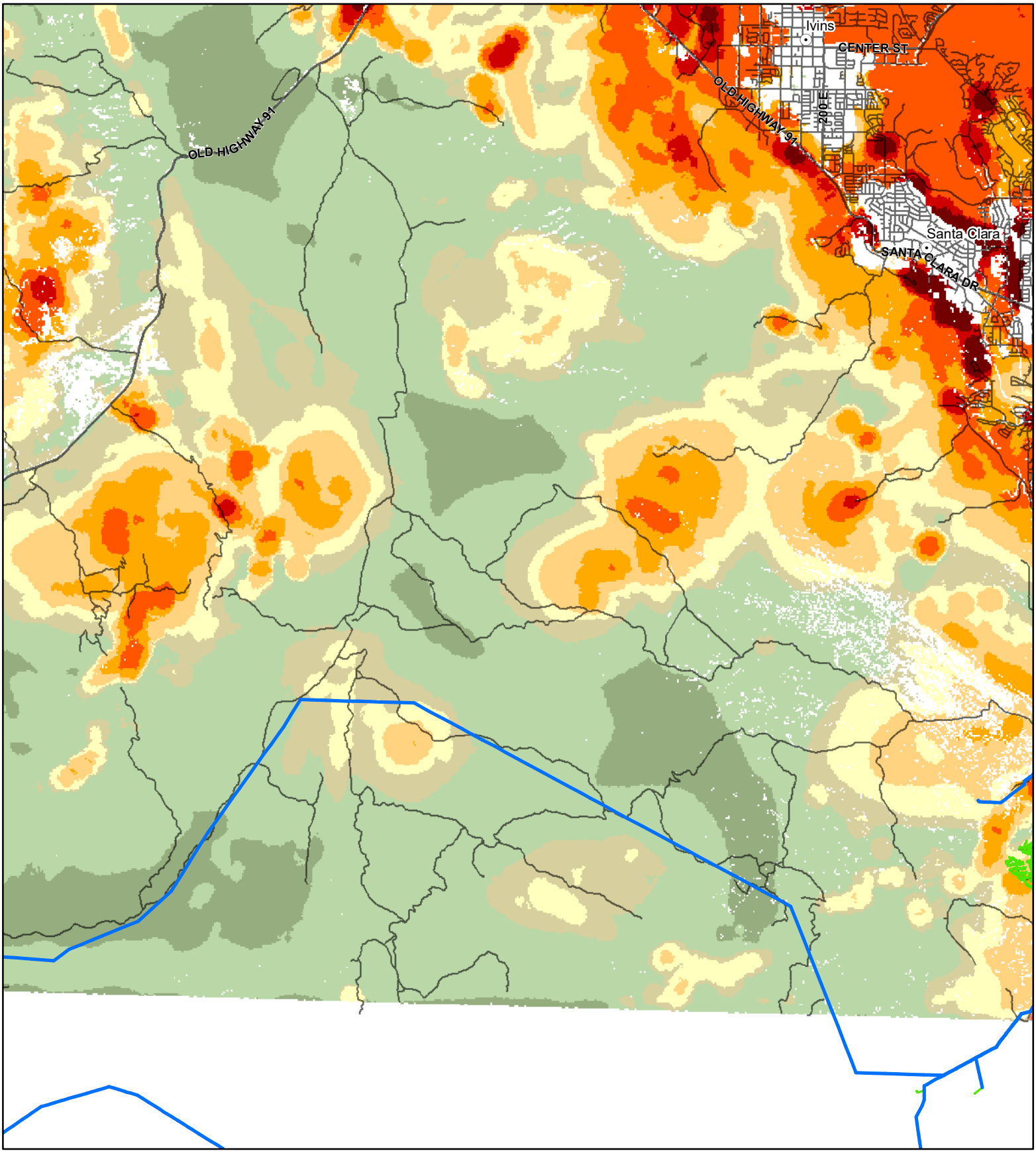
- <= 0.000377
- 0.000378 to 0.002113
- 0.002114 to 0.003370
- 0.003371 to 0.005979
- 0.005980 to 0.011547
- 0.011548 to 0.026047
- 0.026048 to 0.050057
- 0.050058 to 0.097886
- 0.097887 to 1.000000

N

1 2 3 4

0 1 2 Miles

FIRE THREAT INDEX - DIXIE AREA PAGE D2



Overhead Powerline

Underground Powerline

Fire Threat Index

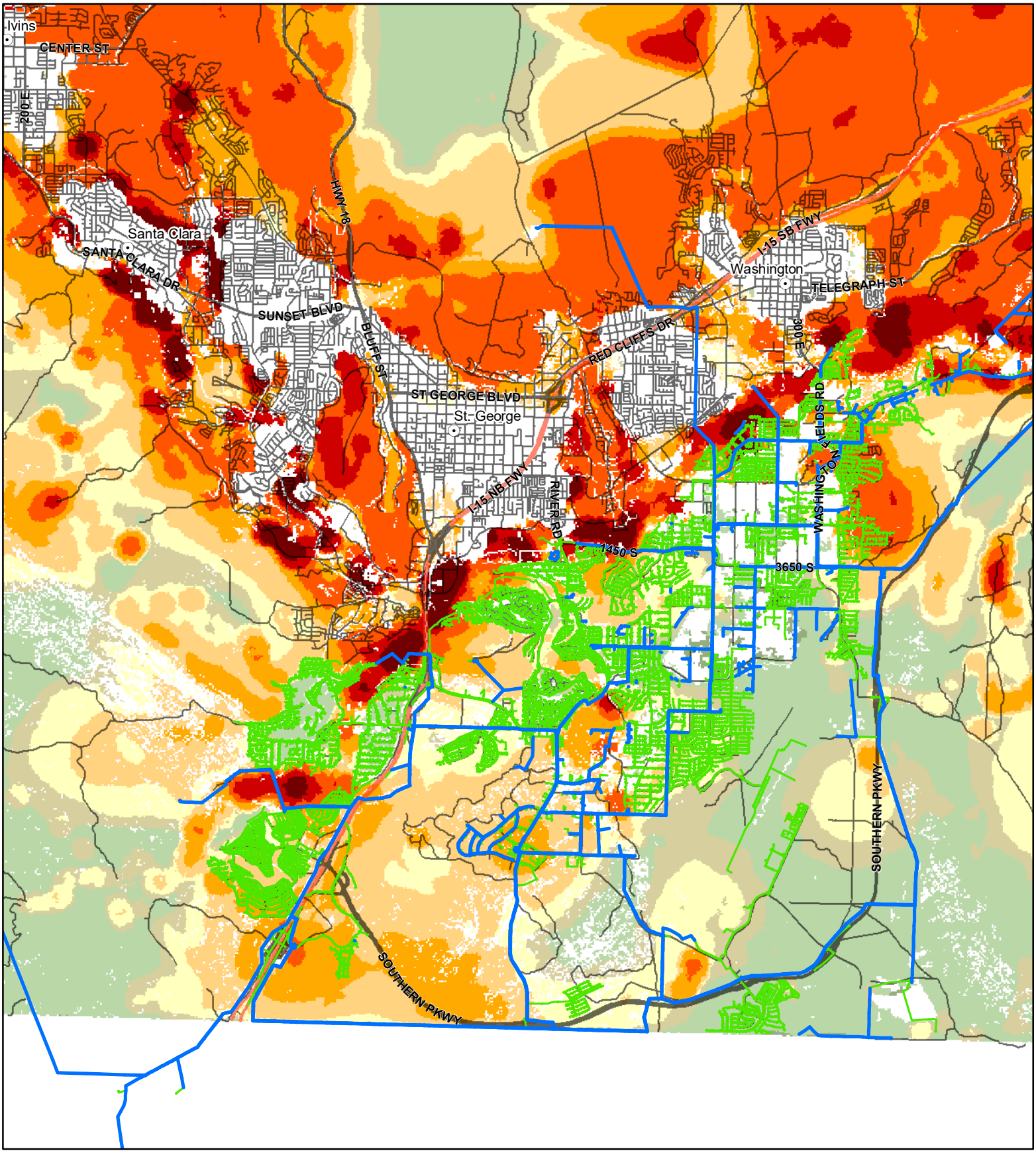
<= 0.000377	0.000378 to 0.002113	0.011548 to 0.026047	
	0.002114 to 0.003370	0.026048 to 0.050057	
	0.003371 to 0.005979	0.050058 to 0.097886	
	0.005980 to 0.011547	0.097887 to 1.000000	

N

1 2 3 4

0 1 2 Miles

FIRE THREAT INDEX - DIXIE AREA PAGE D3



Overhead Powerline

Underground Powerline

Fire Threat Index

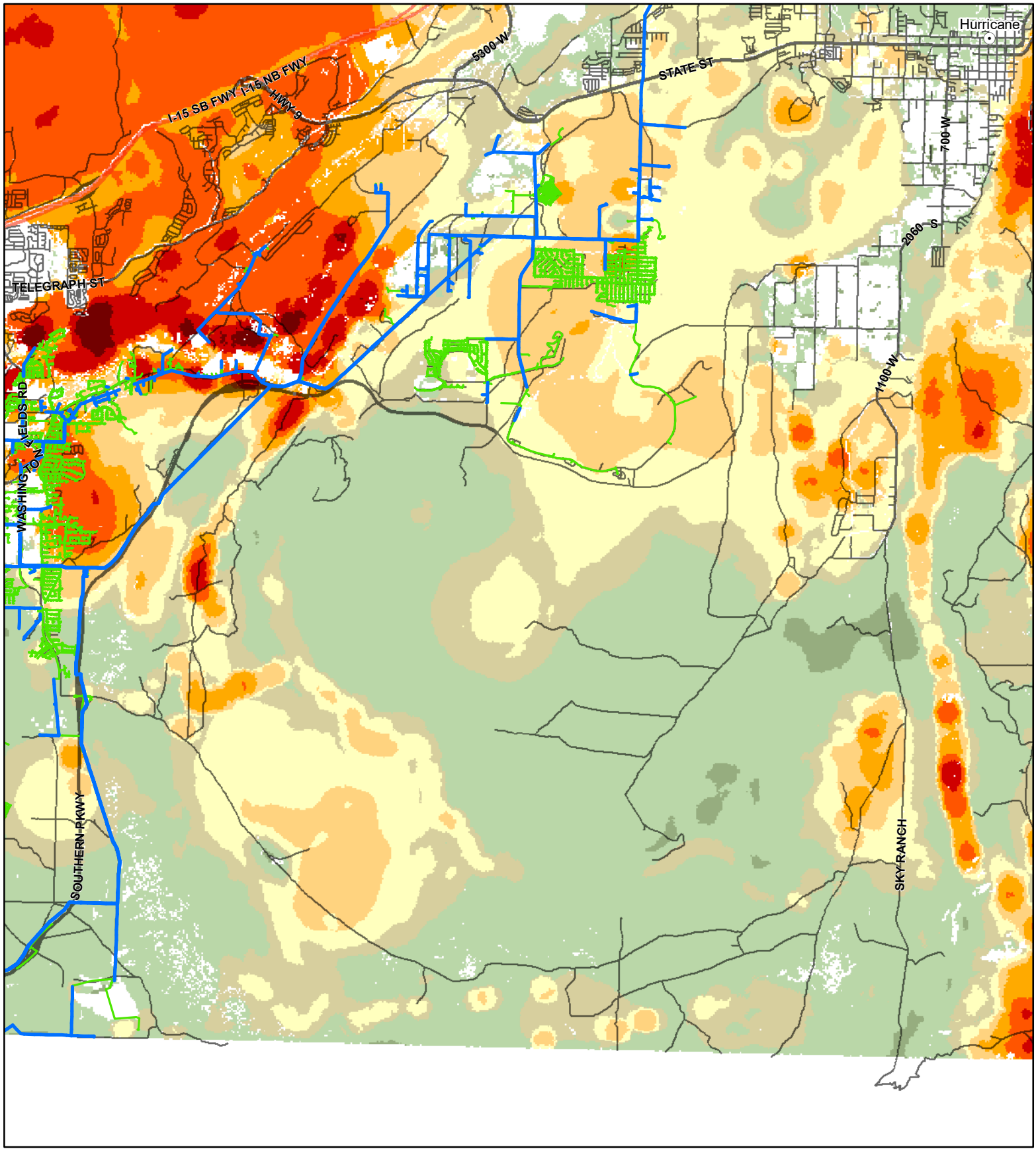
<= 0.000377	0.000378 to 0.002113	0.005980 to 0.011547	0.011548 to 0.026047
	0.002114 to 0.003370		0.026048 to 0.050057
	0.003371 to 0.005979		0.050058 to 0.097886
			0.097887 to 1.000000

N

1 2 3 4

0 1 2 Miles

FIRE THREAT INDEX - DIXIE AREA PAGE D4



Overhead Powerline

Underground Powerline

Fire Threat Index

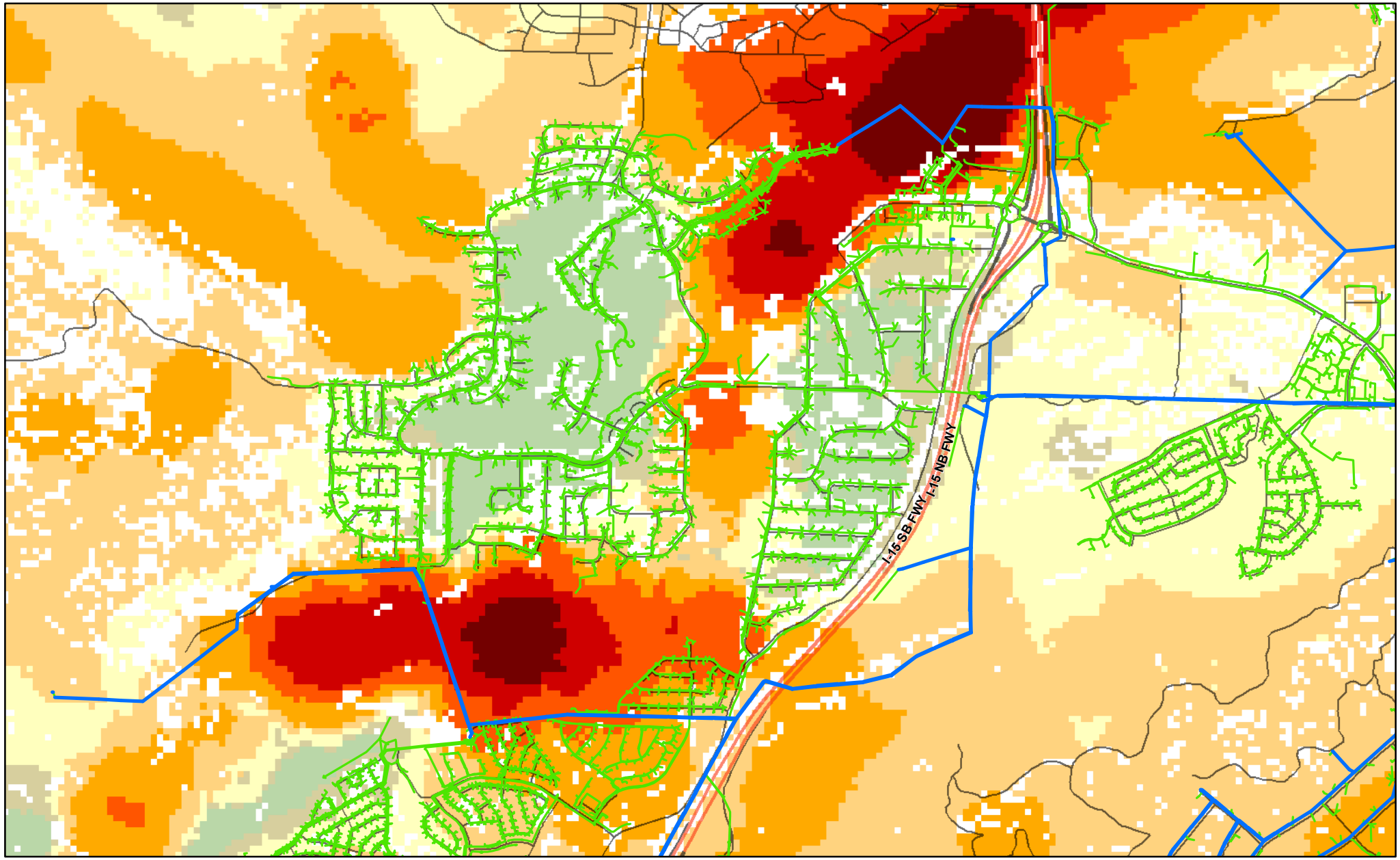
<= 0.000377	0.000378 to 0.002113	0.002114 to 0.003370	0.003371 to 0.005979
0.005980 to 0.011547	0.011548 to 0.026047	0.026048 to 0.050057	0.050058 to 0.097886
0.097887 to 1.000000			

N

1 2 3 4

0 1 2 Miles

FIRE THREAT INDEX - DIXIE HIGH THREAT AREAS PAGE 1



Overhead Powerline
Underground Powerline

Fire Threat Index

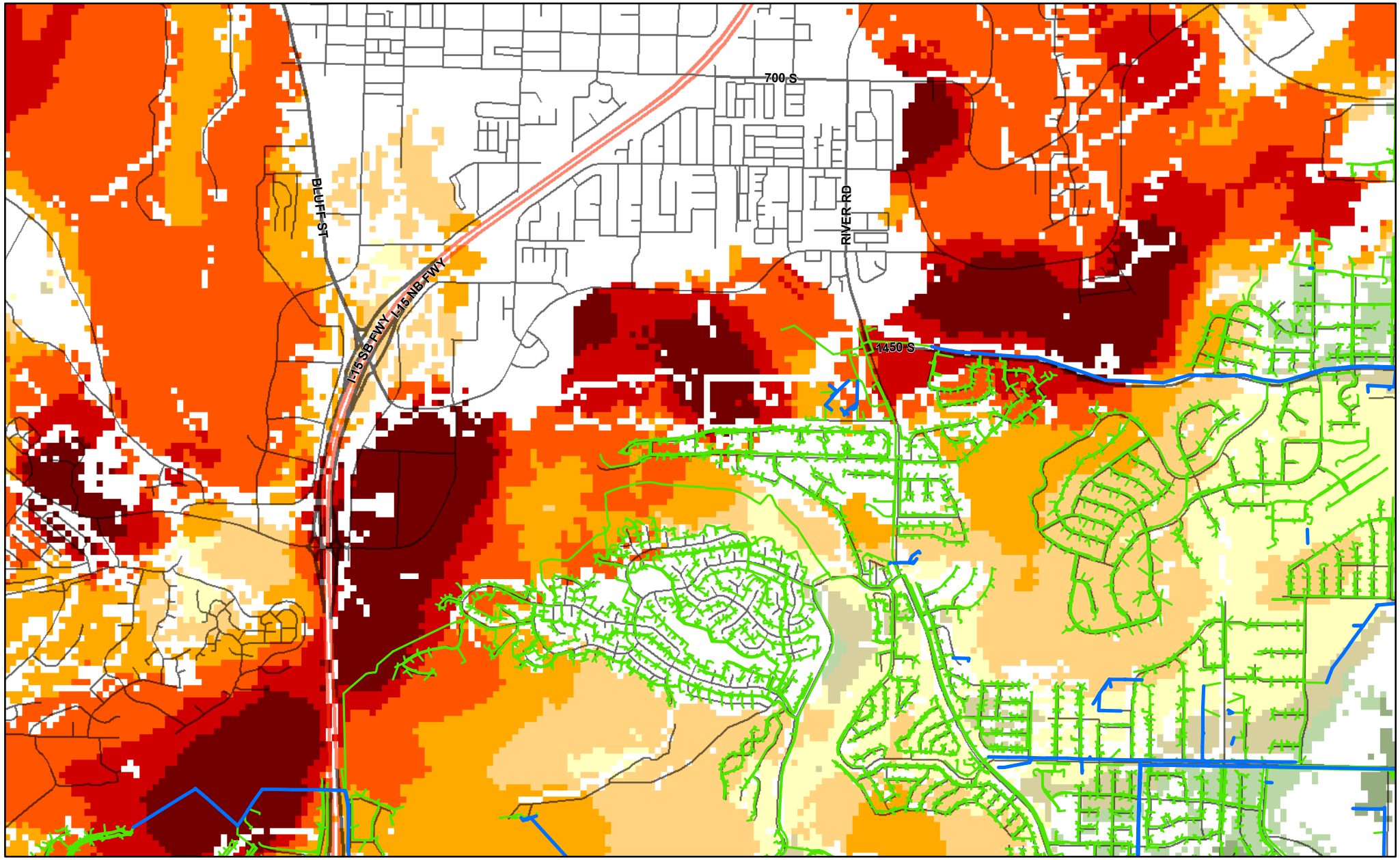
0.000378 to 0.002113	0.002114 to 0.003370	0.026048 to 0.050057
	0.003371 to 0.005979	0.050058 to 0.097886
	0.005980 to 0.011547	0.097887 to 1.000000
	0.011548 to 0.026047	

N

0 0.5 1 Miles

1 2 3 4

FIRE THREAT INDEX - DIXIE HIGH THREAT AREAS PAGE 2



Overhead Powerline

Underground Powerline

Fire Threat Index

<= 0.000377

0.000378 to 0.002113

0.002114 to 0.003370

0.003371 to 0.005979

0.005980 to 0.011547

0.011548 to 0.026047

0.026048 to 0.050057

0.050058 to 0.097886

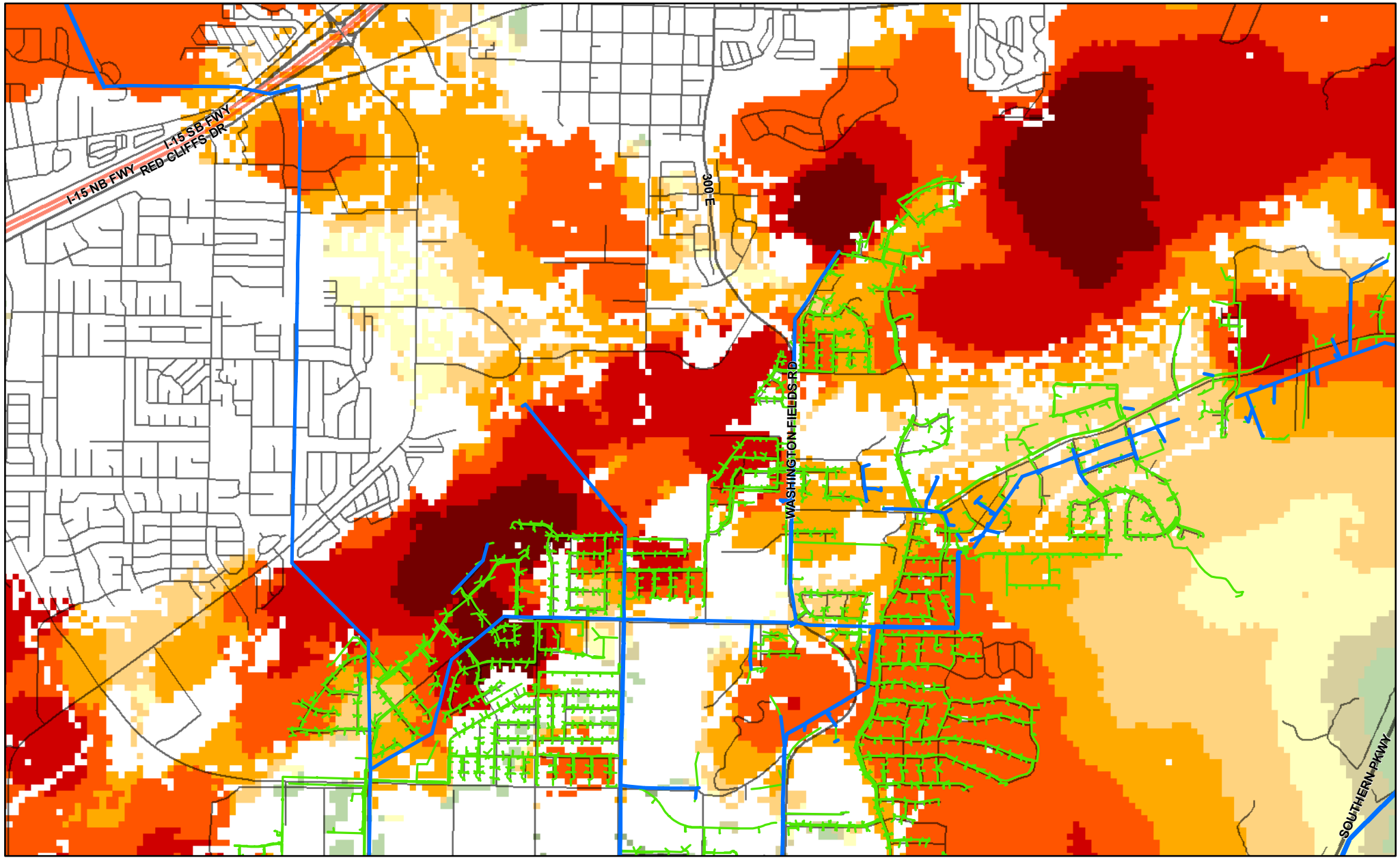
0.097887 to 1.000000

N

0 0.5 1 Miles

1 2 3 4

FIRE THREAT INDEX - DIXIE HIGH THREAT AREAS PAGE 3



Overhead Powerline
Underground Powerline

Fire Threat Index

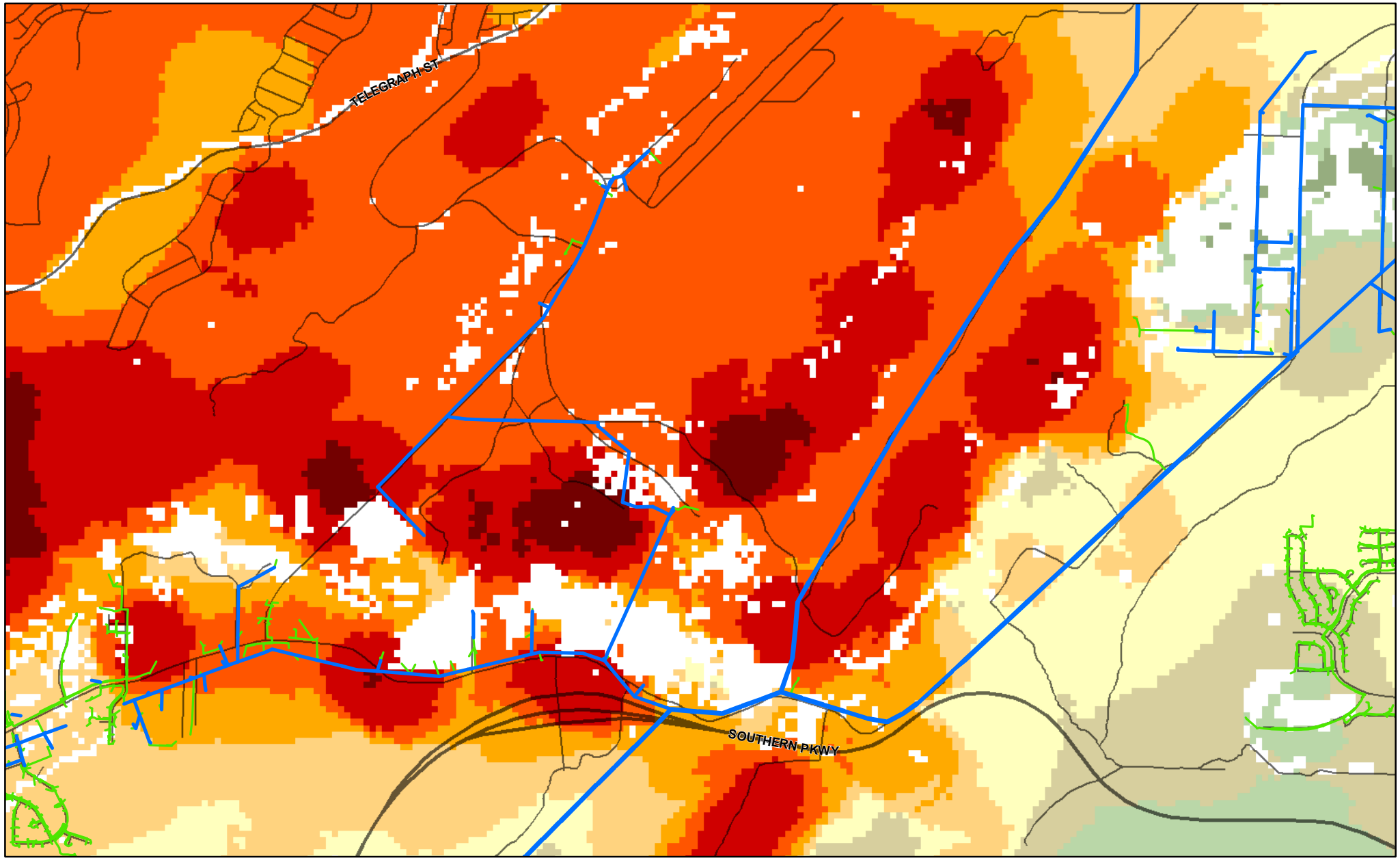
<= 0.000377	0.000378 to 0.002113	0.011548 to 0.026047	
	0.002114 to 0.003370	0.026048 to 0.050057	
	0.003371 to 0.005979	0.050058 to 0.097886	
	0.005980 to 0.011547	0.097887 to 1.000000	

N

0 0.5 1 Miles

1 2 3 4

FIRE THREAT INDEX - DIXIE HIGH THREAT AREAS PAGE 4



Overhead Powerline
Underground Powerline

Fire Threat Index

<= 0.000377	0.000378 to 0.002113	0.011548 to 0.026047
	0.002114 to 0.003370	0.026048 to 0.050057
	0.003371 to 0.005979	0.050058 to 0.097886
	0.005980 to 0.011547	0.097887 to 1.000000

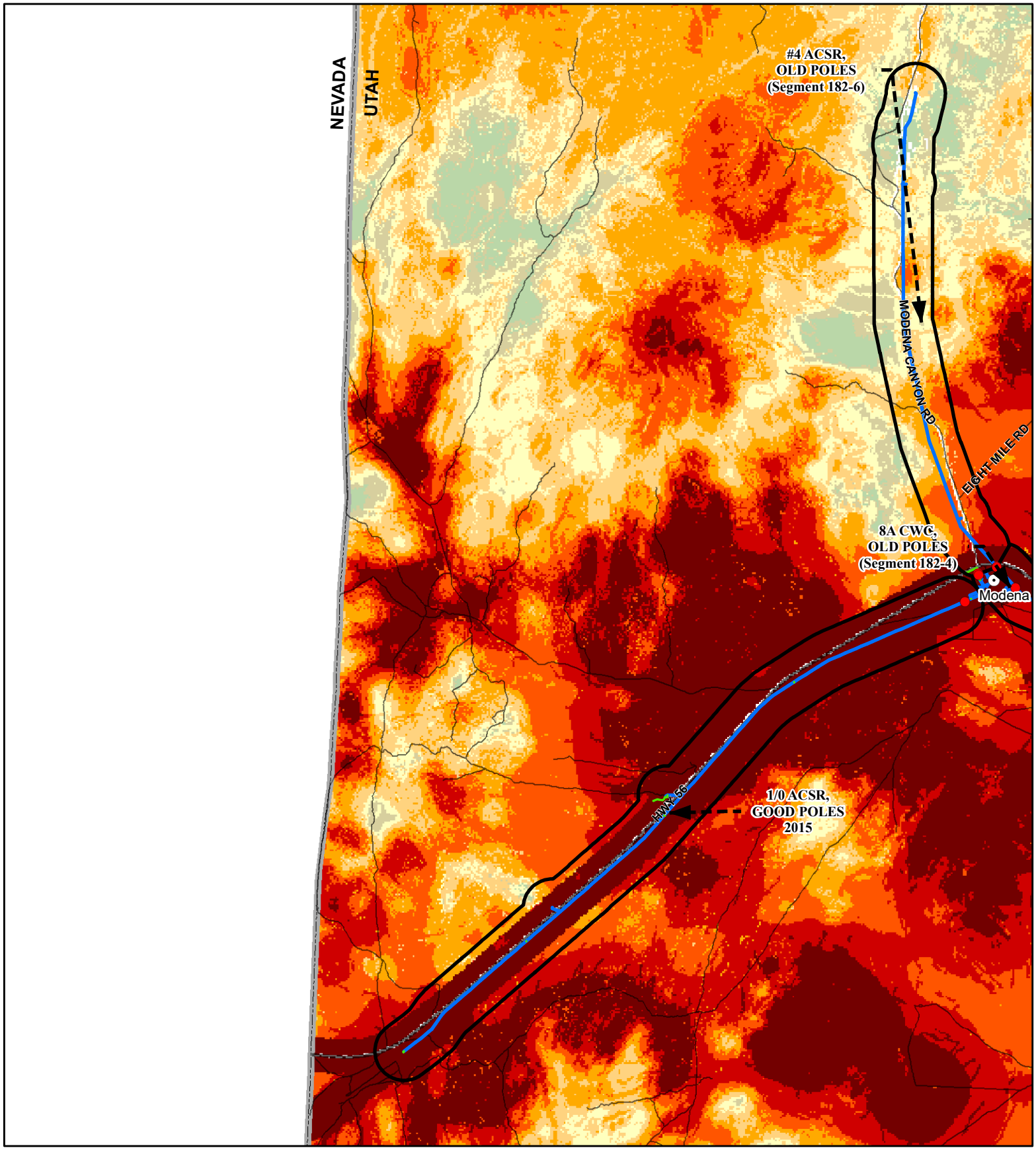
N

0 0.5 1 Miles

1 2 3 4

Appendix D: Maps of Dixie Power's lines relative to Fire Risk Index Areas

FIRE RISK INDEX - BERYL AREA PAGE B1



Fuse
Overhead Powerline
Underground Powerline
State Boundary

Line Comment

Fire Risk Index

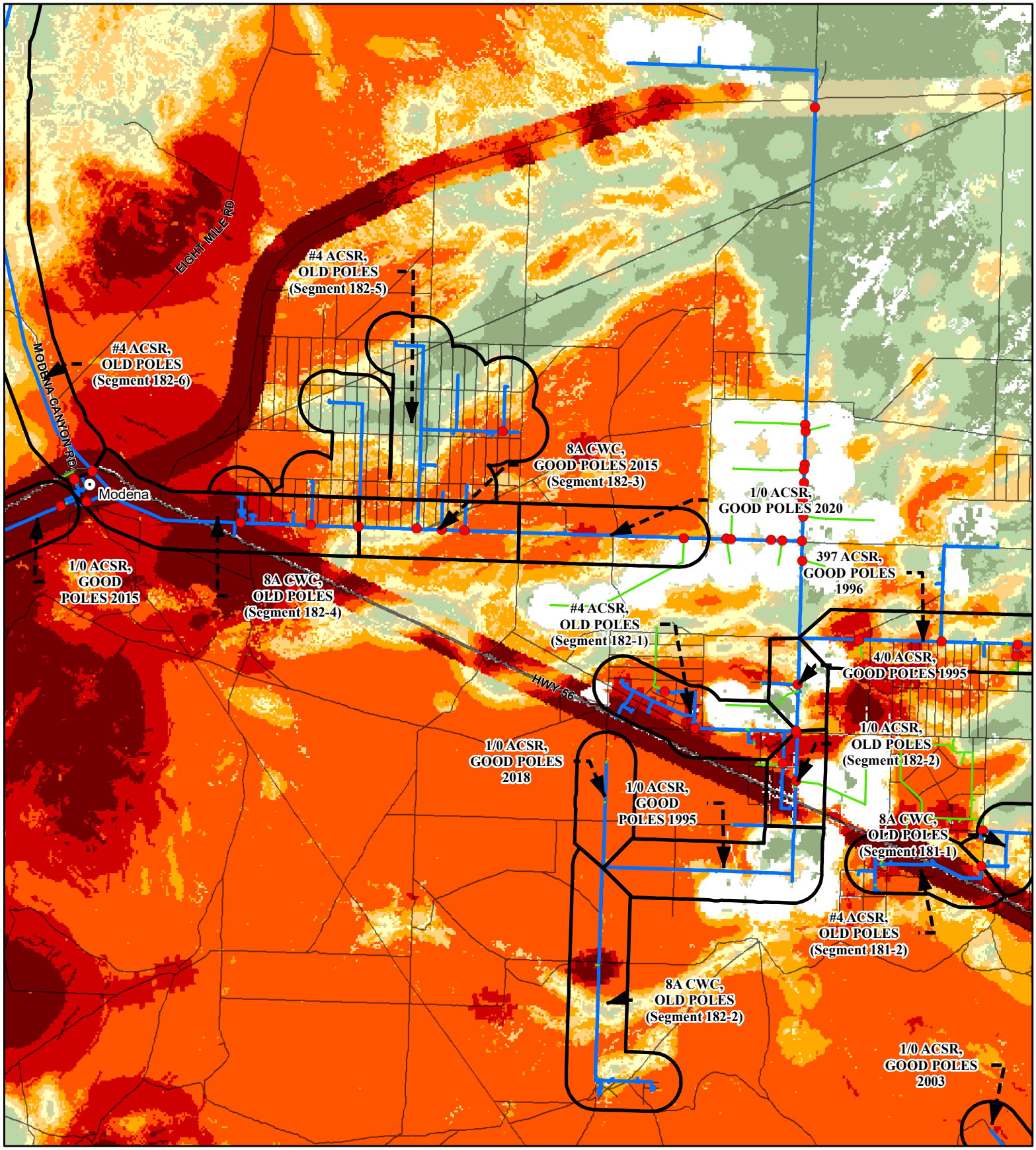
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 1 2 Miles

3	4
1	2
5	6
7	8
	9

FIRE RISK INDEX - BERYL AREA PAGE B2



Fuse
Overhead Powerline
Underground Powerline
Line Comment

Fire Risk Index

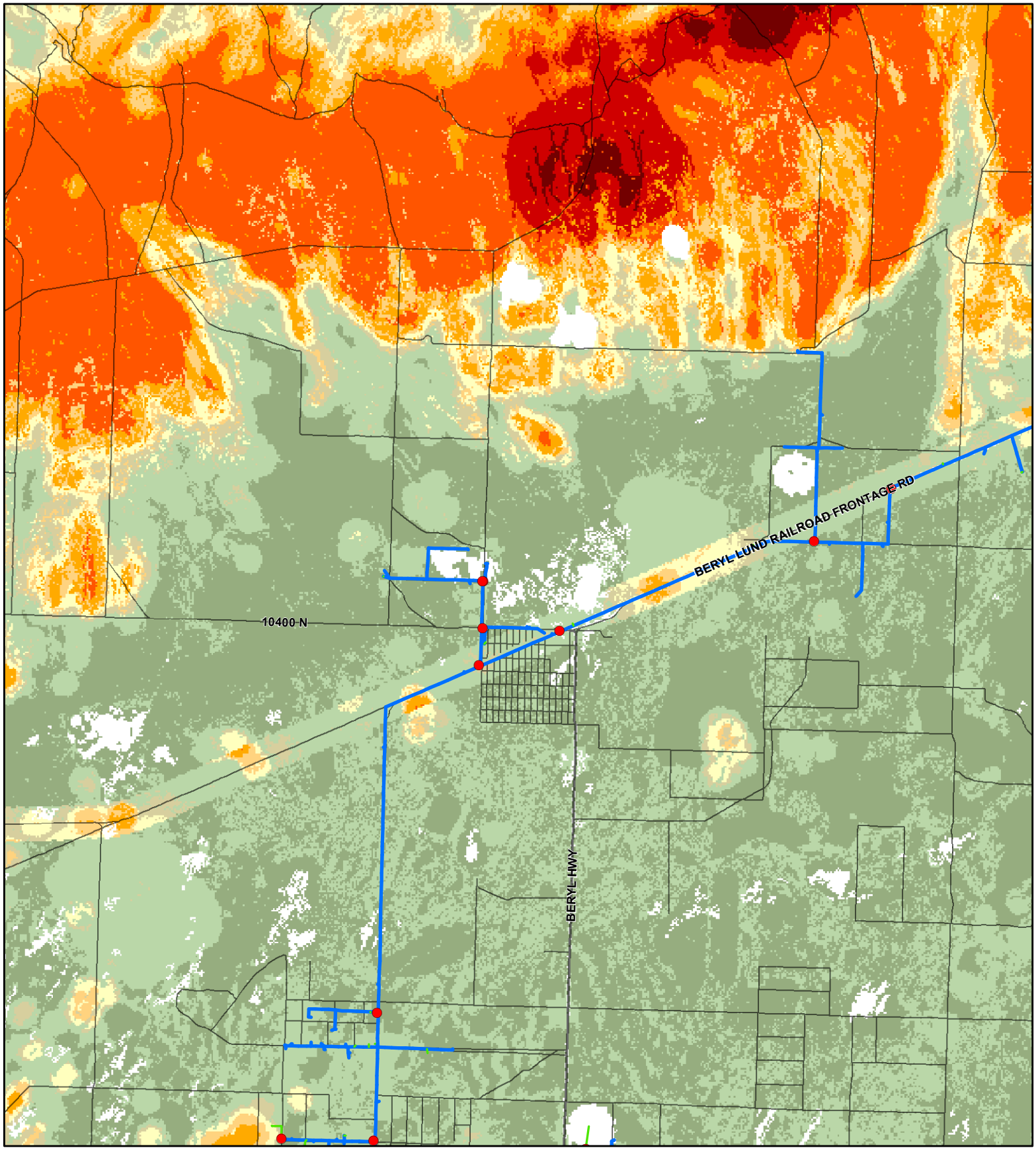
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 1 2 Miles

		3	4
1	2	5	6
		7	8
			9

FIRE RISK INDEX - BERYL AREA PAGE B3



Fuse
Overhead Powerline
Underground Powerline

Fire Risk Index

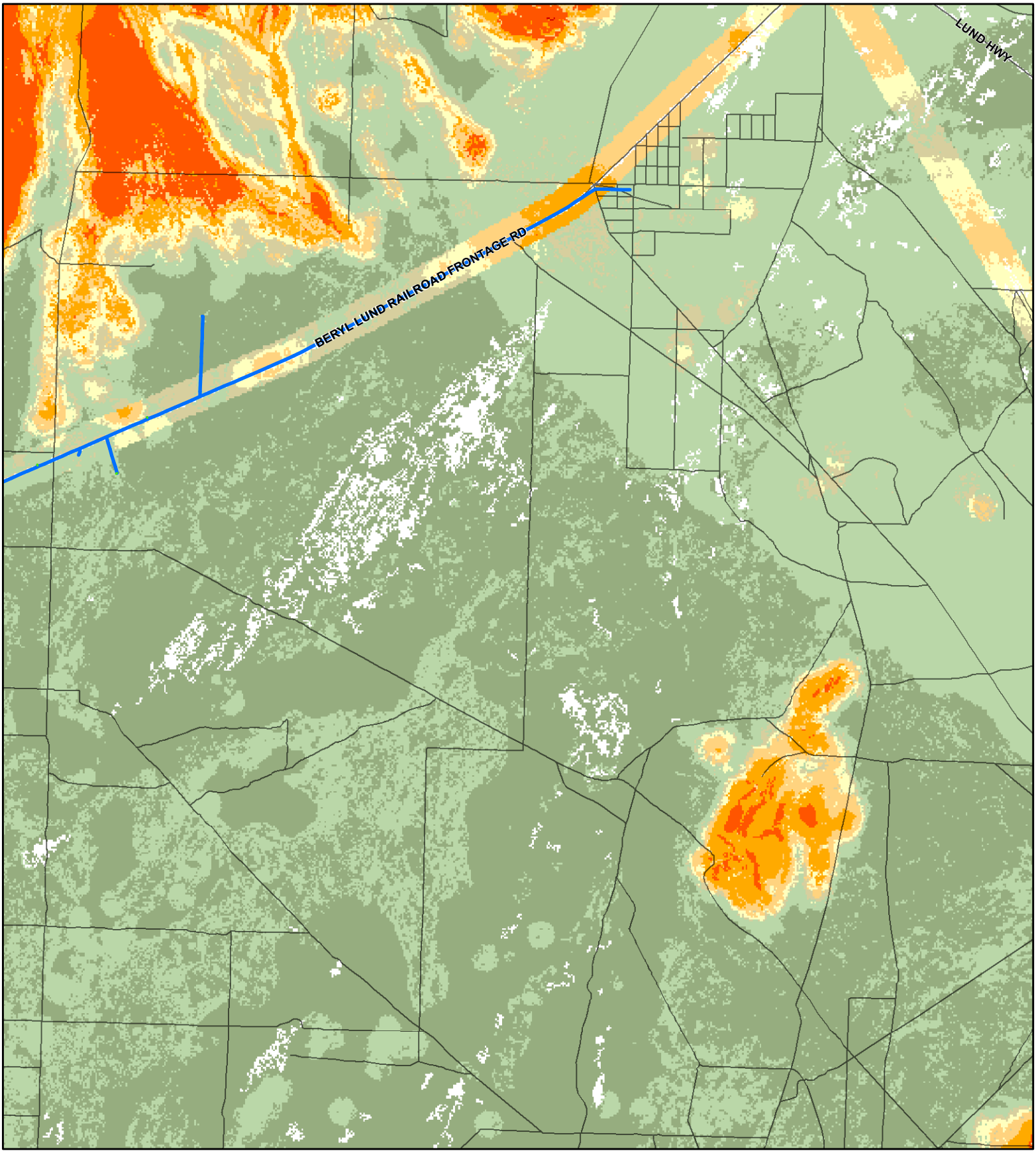
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 1 2 Miles

		3 4
1	2	5 6
		7 8
		9

FIRE RISK INDEX - BERYL AREA PAGE B4



Overhead Powerline
Underground Powerline

Fire Risk Index

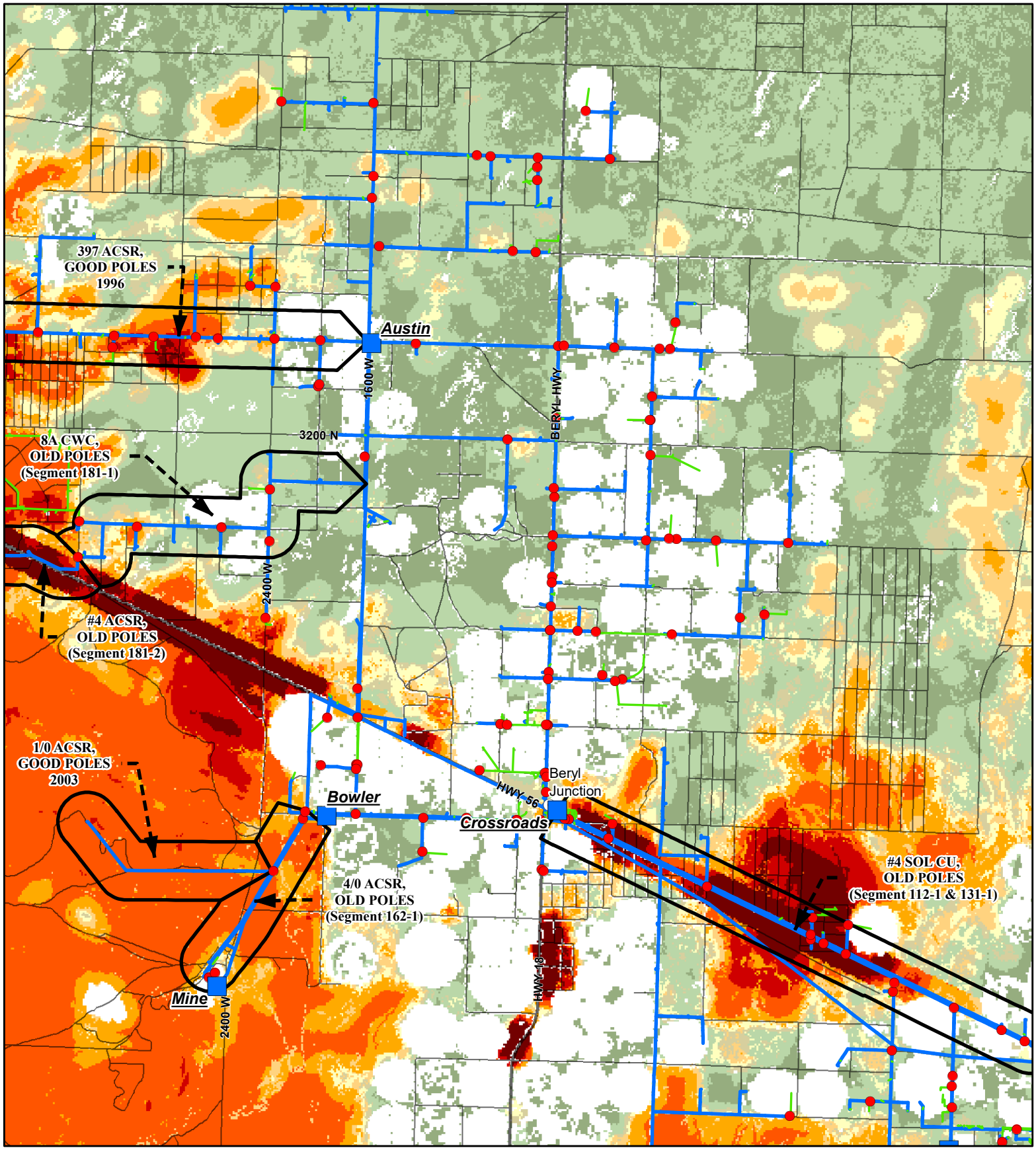
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33

N

0 1 2 Miles

1	2	3
		4
		5
		6
		7
		8
		9

FIRE RISK INDEX - BERYL AREA PAGE B5



Substation
Fuse
Overhead Powerline
Underground Powerline

Line Comment

Fire Risk Index

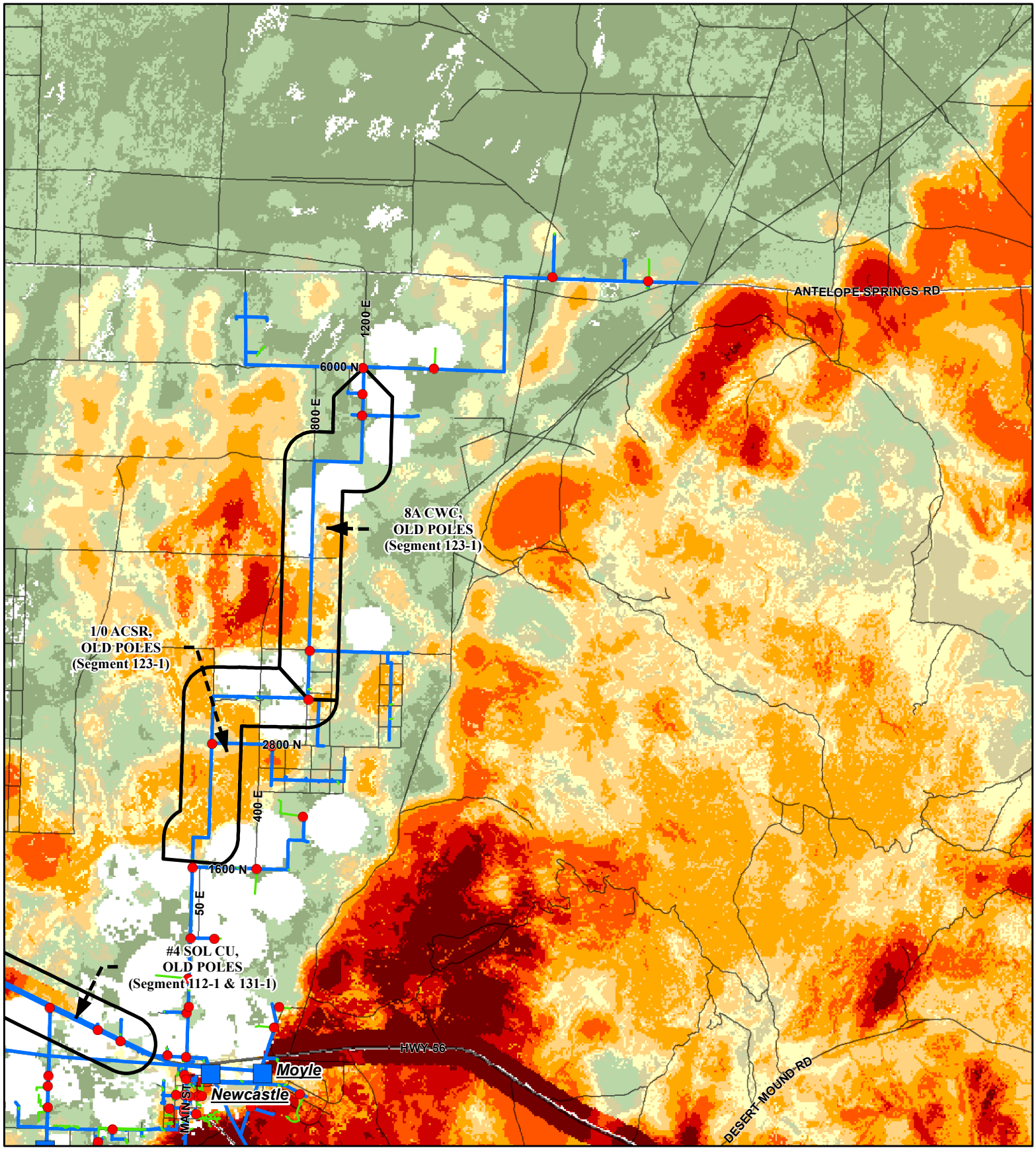
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1	2	3
		4
		5
		6
		7
		8
		9

0 1 2 Miles

FIRE RISK INDEX - BERYL AREA PAGE B6



Substation
Fuse
Overhead Powerline
Underground Powerline

Line Comment

Fire Risk Index

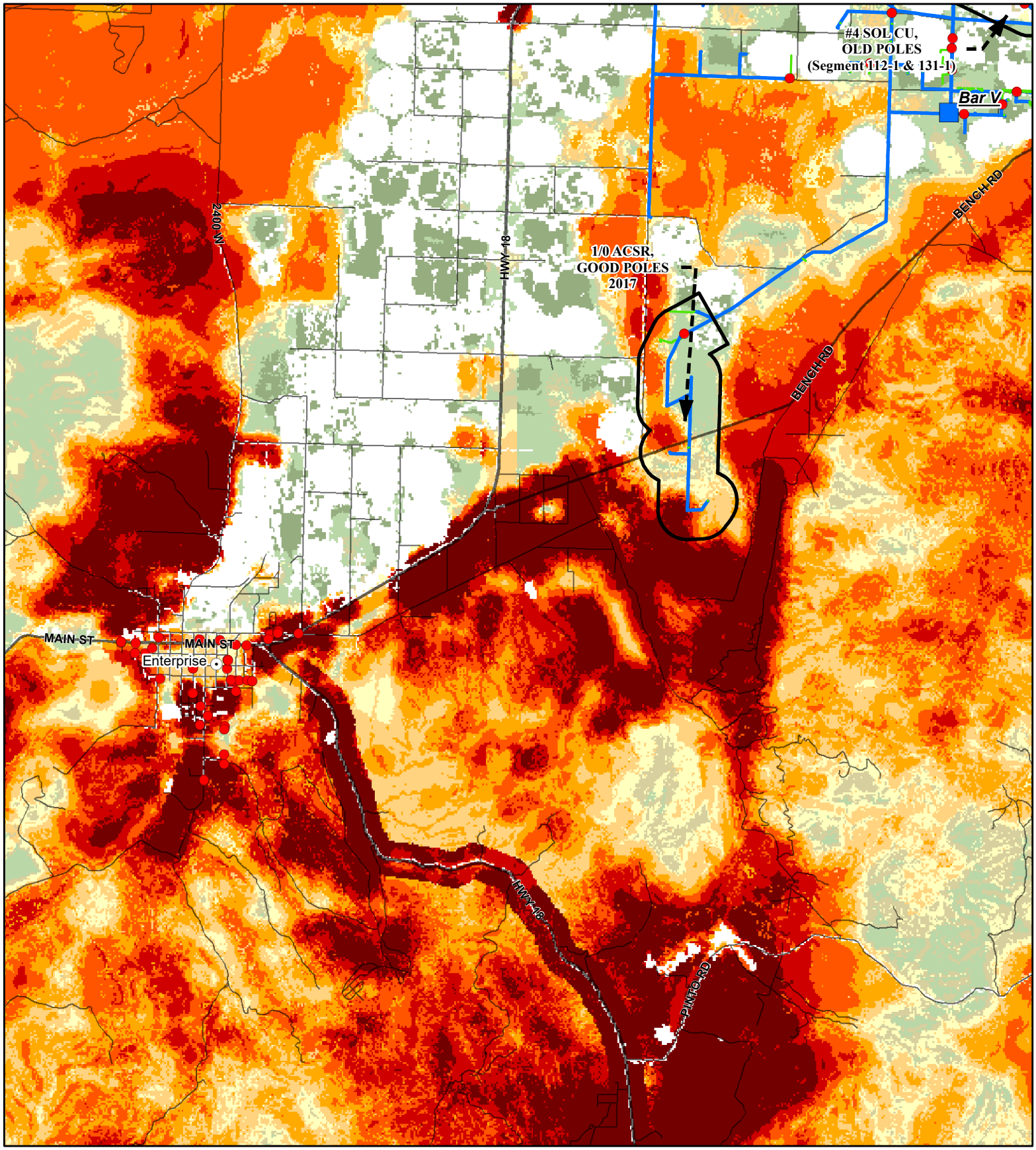
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1	2	3
		4
		5
		6
		7
		8
		9

0 1 2 Miles

FIRE RISK INDEX - BERYL AREA PAGE B7



Substation
Fuse
Overhead Powerline
Underground Powerline

Line Comment

Fire Risk Index

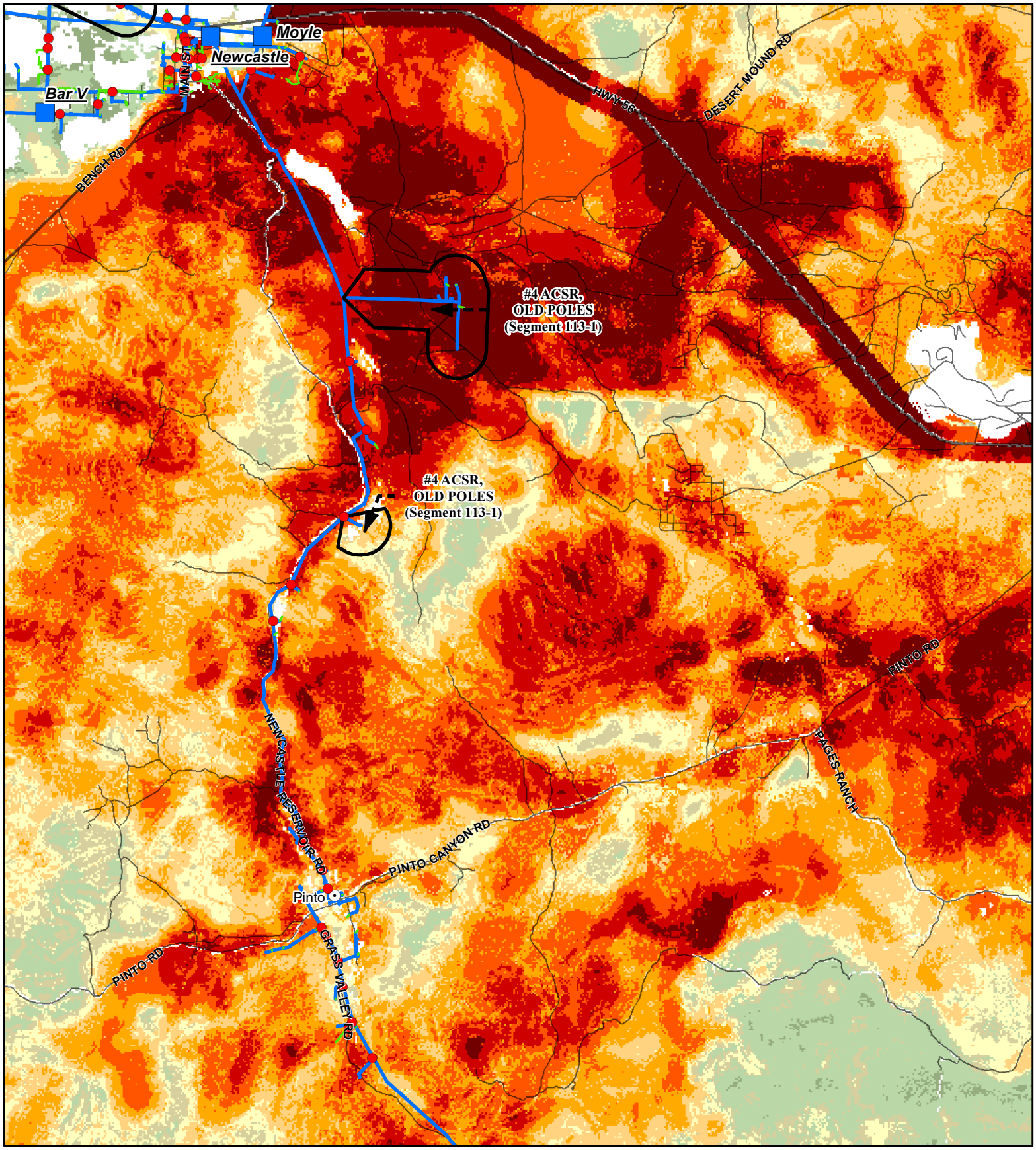
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1	2	
	5	6
	7	8
3	4	
		9

0 1 2 Miles

FIRE RISK INDEX - BERYL AREA PAGE B8



Substation
Fuse
Overhead Powerline
Underground Powerline

Line Comment

Fire Risk Index

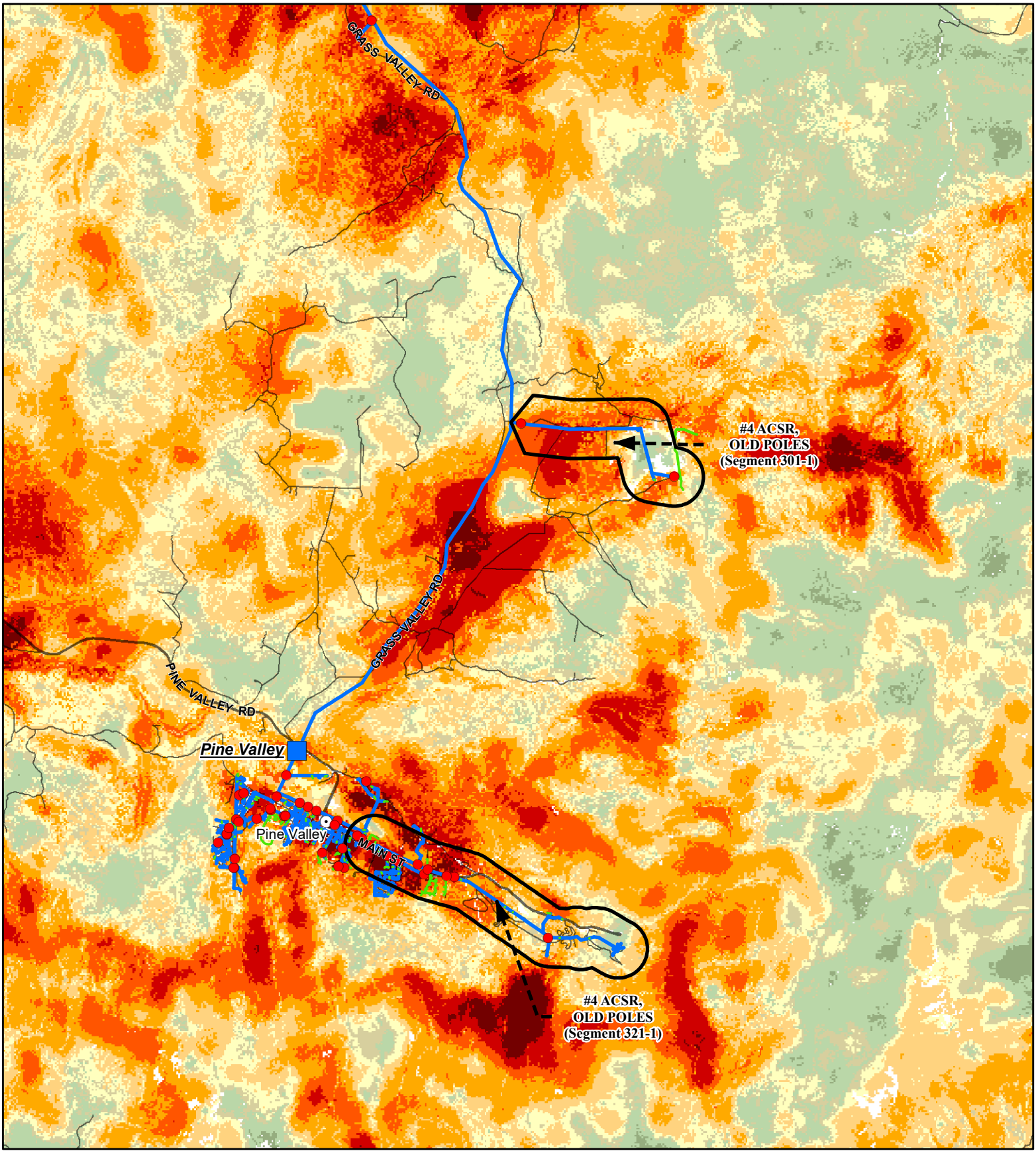
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1	2	3	4
		5	6
		7	8
			9

0 1 2 Miles

FIRE RISK INDEX - BERYL AREA PAGE B9



Substation
Fuse
Overhead Powerline
Underground Powerline

Line Comment

Fire Risk Index

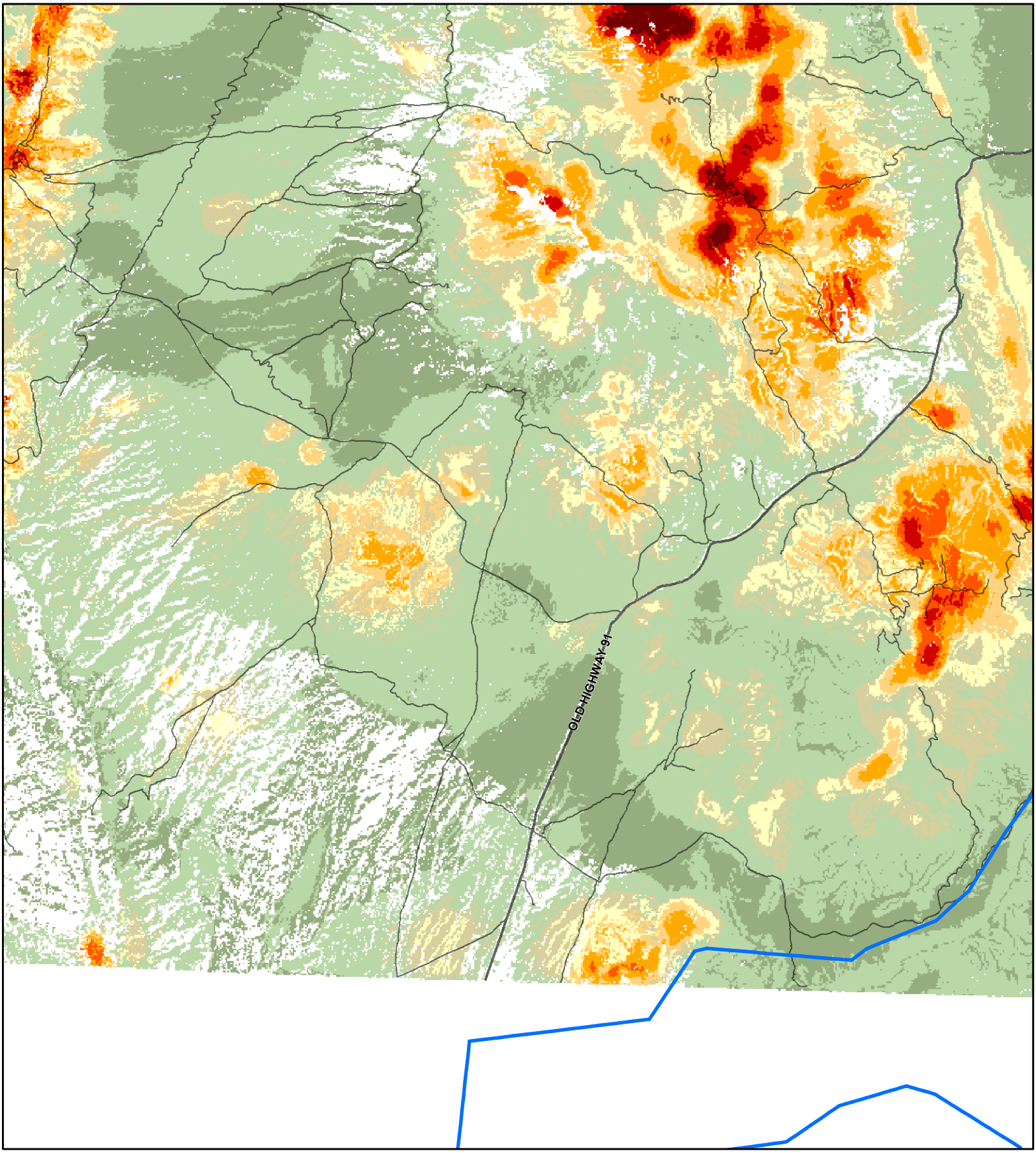
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1	2	3	4
		5	6
		7	8
			9

0 1 2 Miles

FIRE RISK INDEX - DIXIE AREA PAGE D1



Overhead Powerline

Fire Risk Index

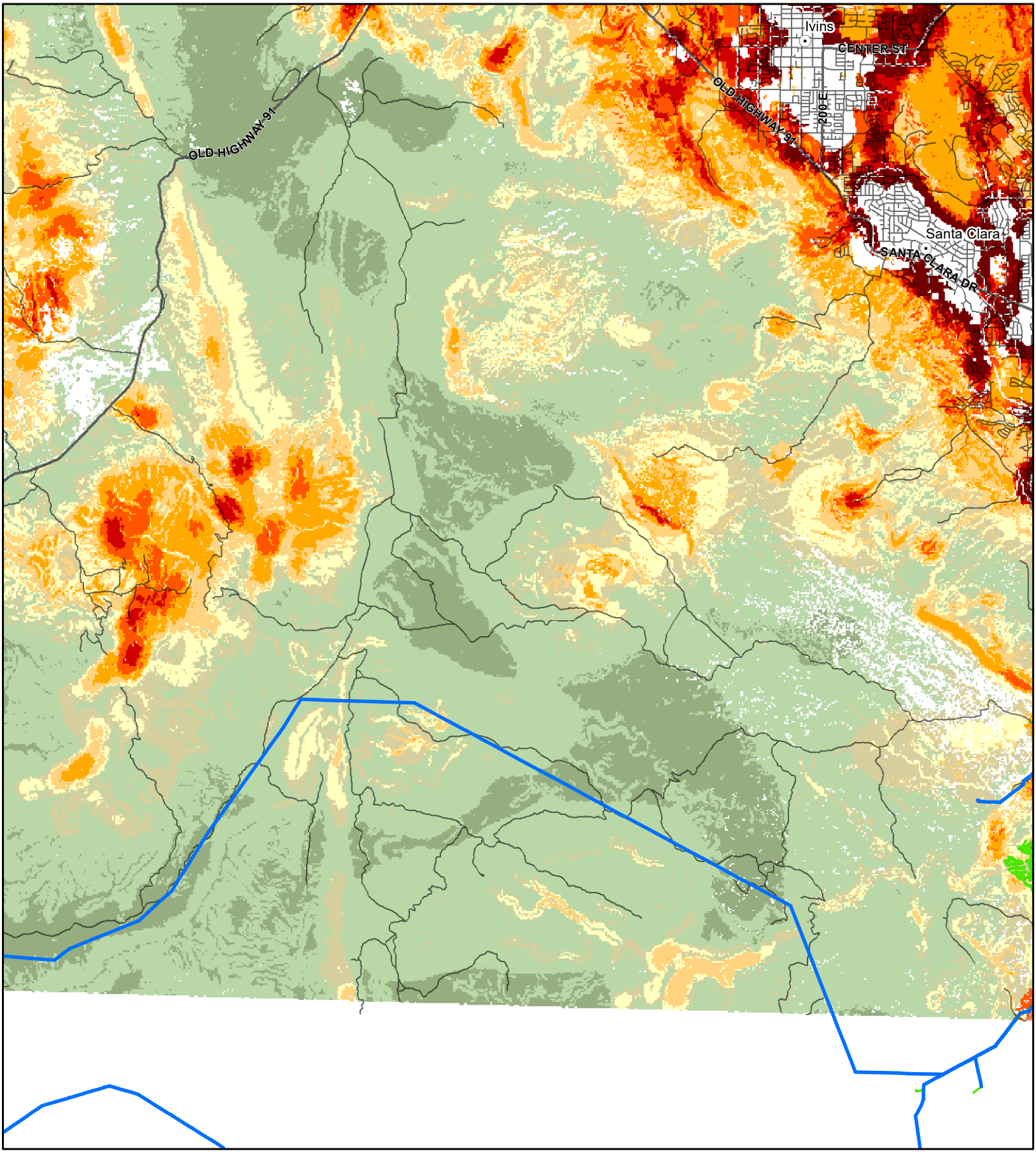
- >= -1.1
- -1.101 to -8.82
- -8.821 to -15.2
- -15.201 to -29.87
- -29.871 to -65.1
- -65.101 to -149.41
- -149.411 to -315.72
- -315.721 to -670.33
- < -670.33

N

1 2 3 4

0 1 2 Miles

FIRE RISK INDEX - DIXIE AREA PAGE D2



Overhead Powerline
Underground Powerline

Fire Risk Index

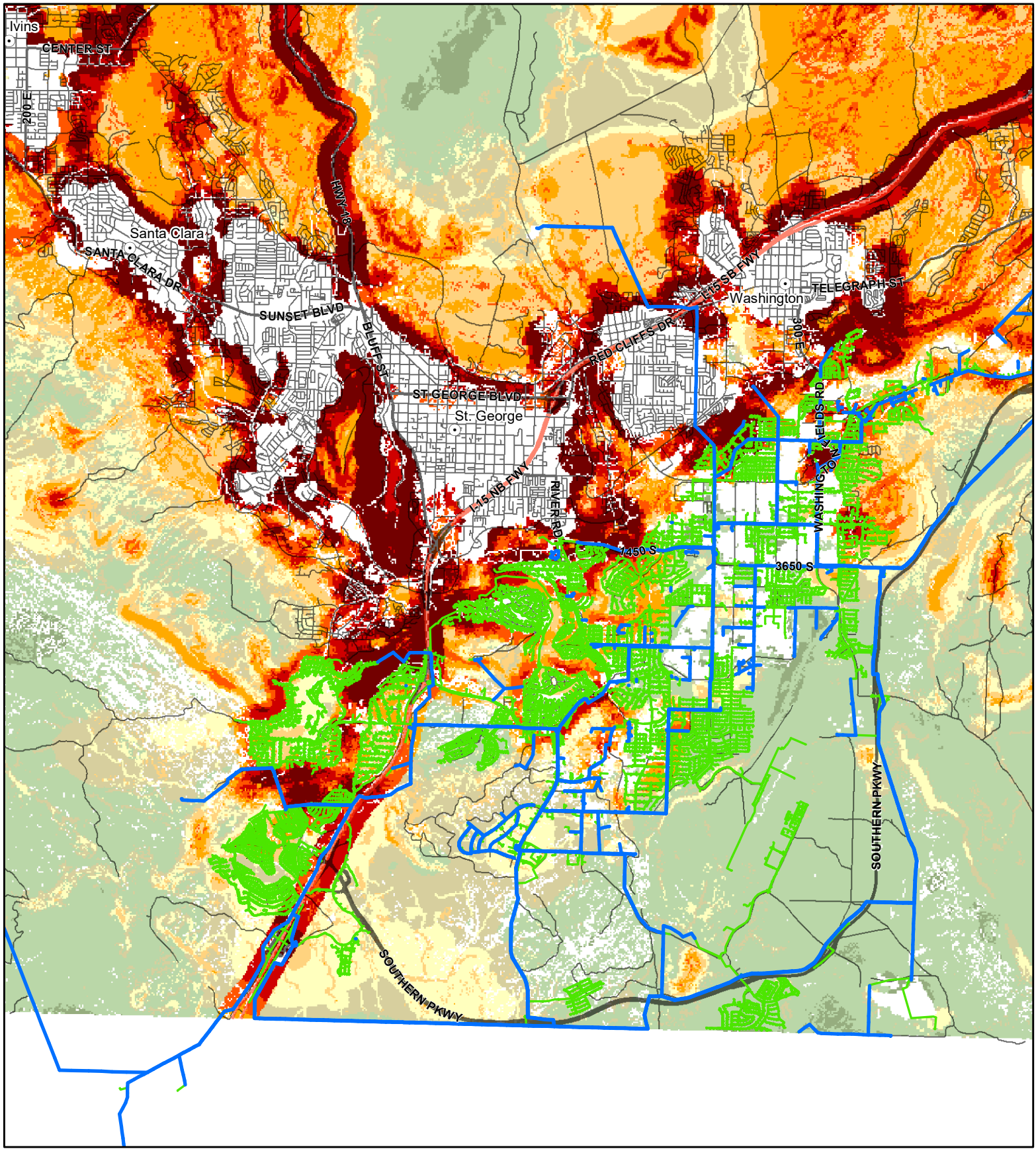
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

1 2 3 4

0 1 2 Miles

FIRE RISK INDEX - DIXIE AREA PAGE D3



Overhead Powerline

Underground Powerline

Fire Risk Index

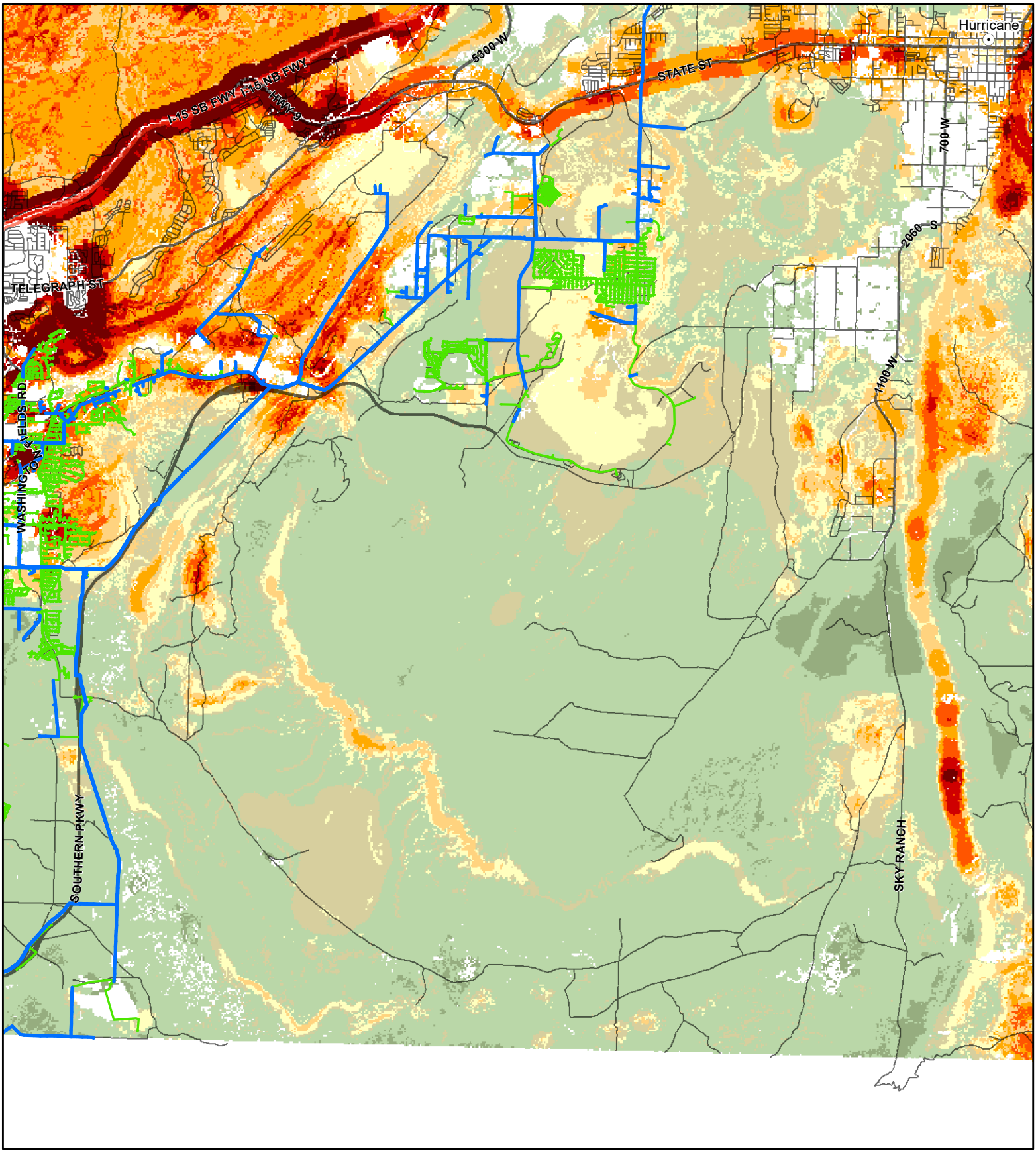
>= -1.1	-1.101 to -8.82	-65.101 to -149.41
	-8.821 to -15.2	-149.411 to -315.72
	-15.201 to -29.87	-315.721 to -670.33
	-29.871 to -65.1	< -670.33

N

1 2 3 4

0 1 2 Miles

FIRE RISK INDEX - DIXIE AREA PAGE D4



Overhead Powerline

Underground Powerline

Fire Risk Index

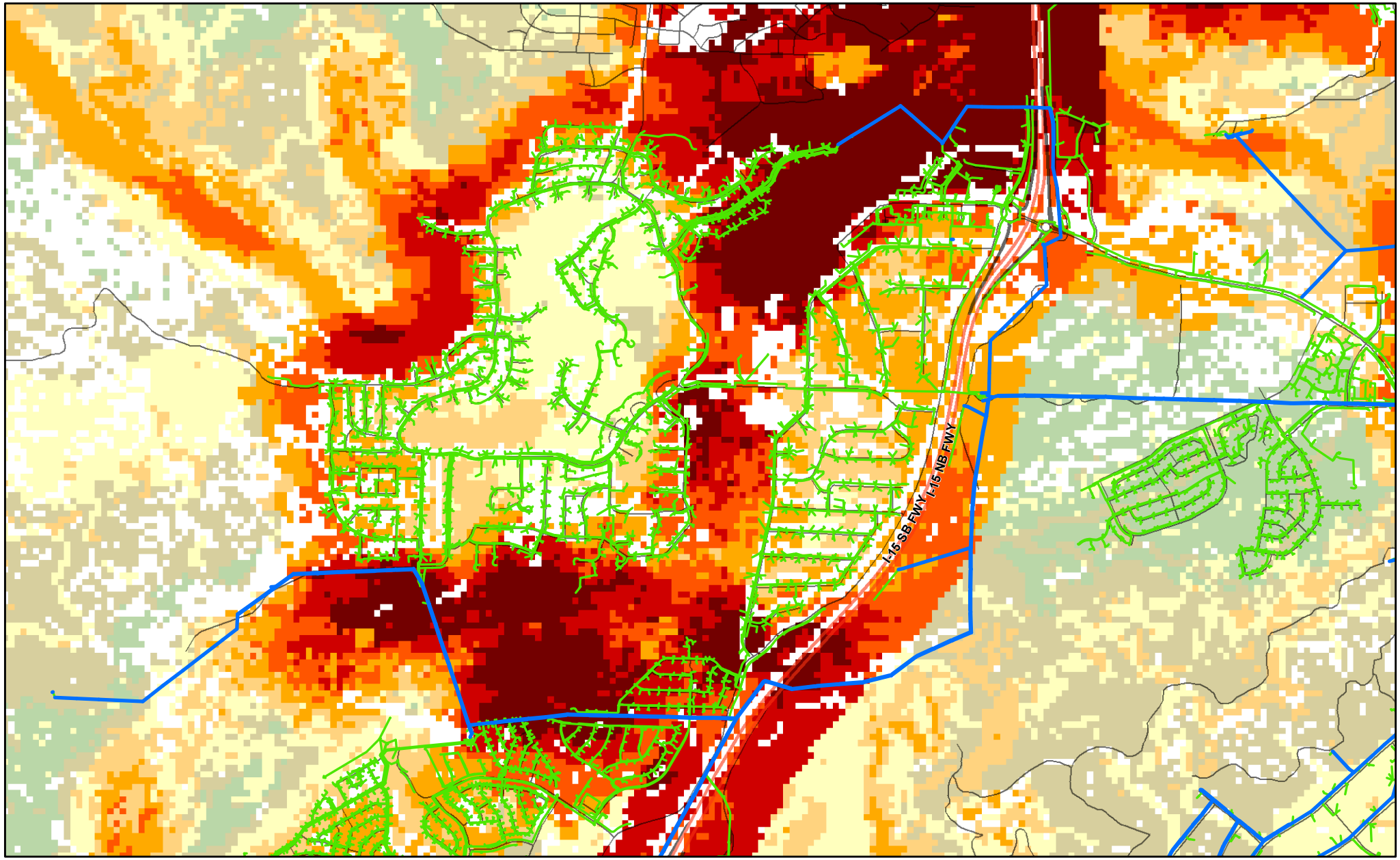
>= -1.1	-1.101 to -8.82	-65.101 to -149.41
	-8.821 to -15.2	-149.411 to -315.72
	-15.201 to -29.87	-315.721 to -670.33
	-29.871 to -65.1	< -670.33

N

1 2 3 4

0 1 2 Miles

FIRE RISK INDEX - DIXIE HIGH THREAT AREAS PAGE 1



Overhead Powerline
Underground Powerline

Fire Risk Index

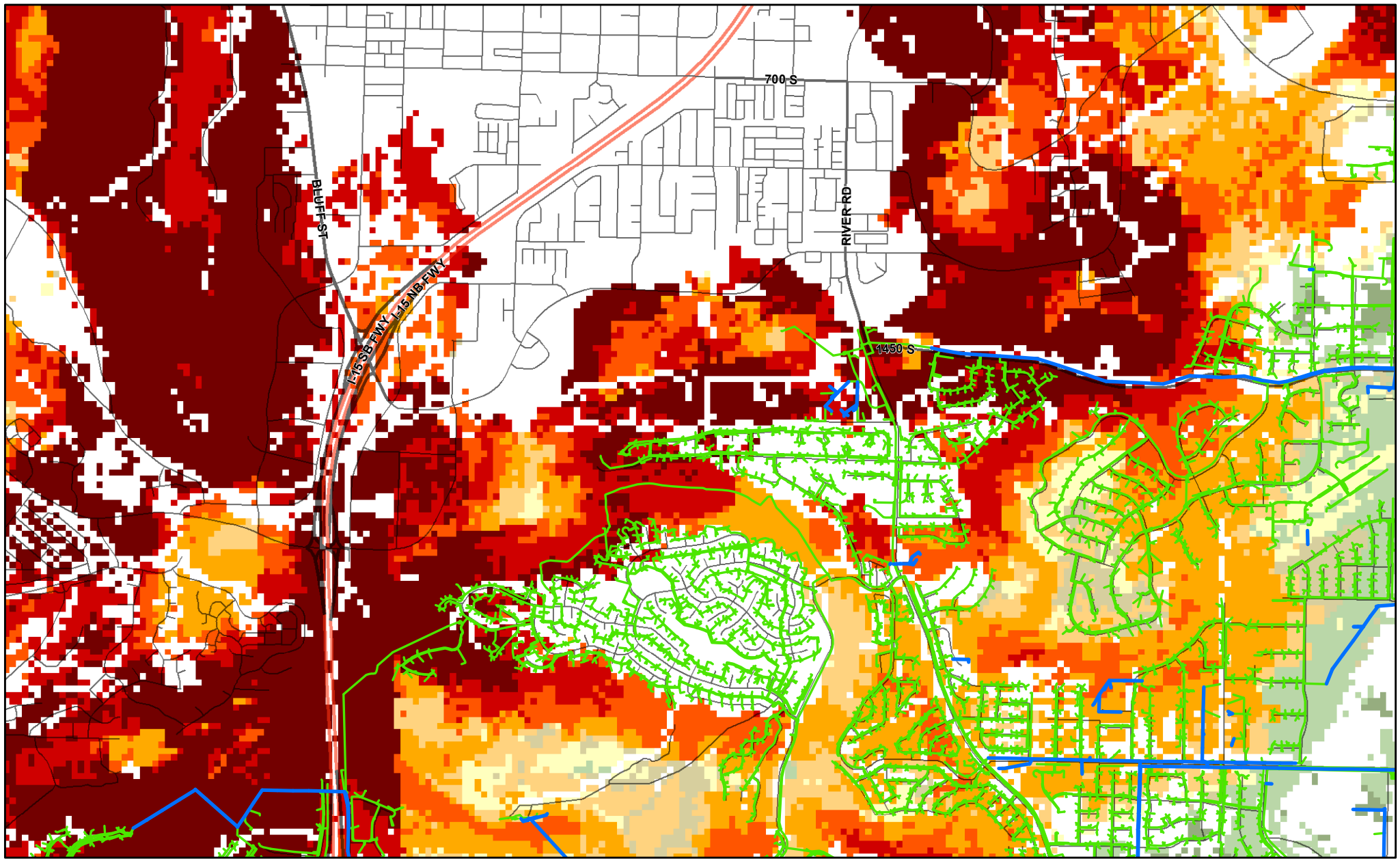
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 0.5 1 Miles

1 2 3 4

FIRE RISK INDEX - DIXIE HIGH THREAT AREAS PAGE 2



Overhead Powerline
Underground Powerline

Fire Risk Index

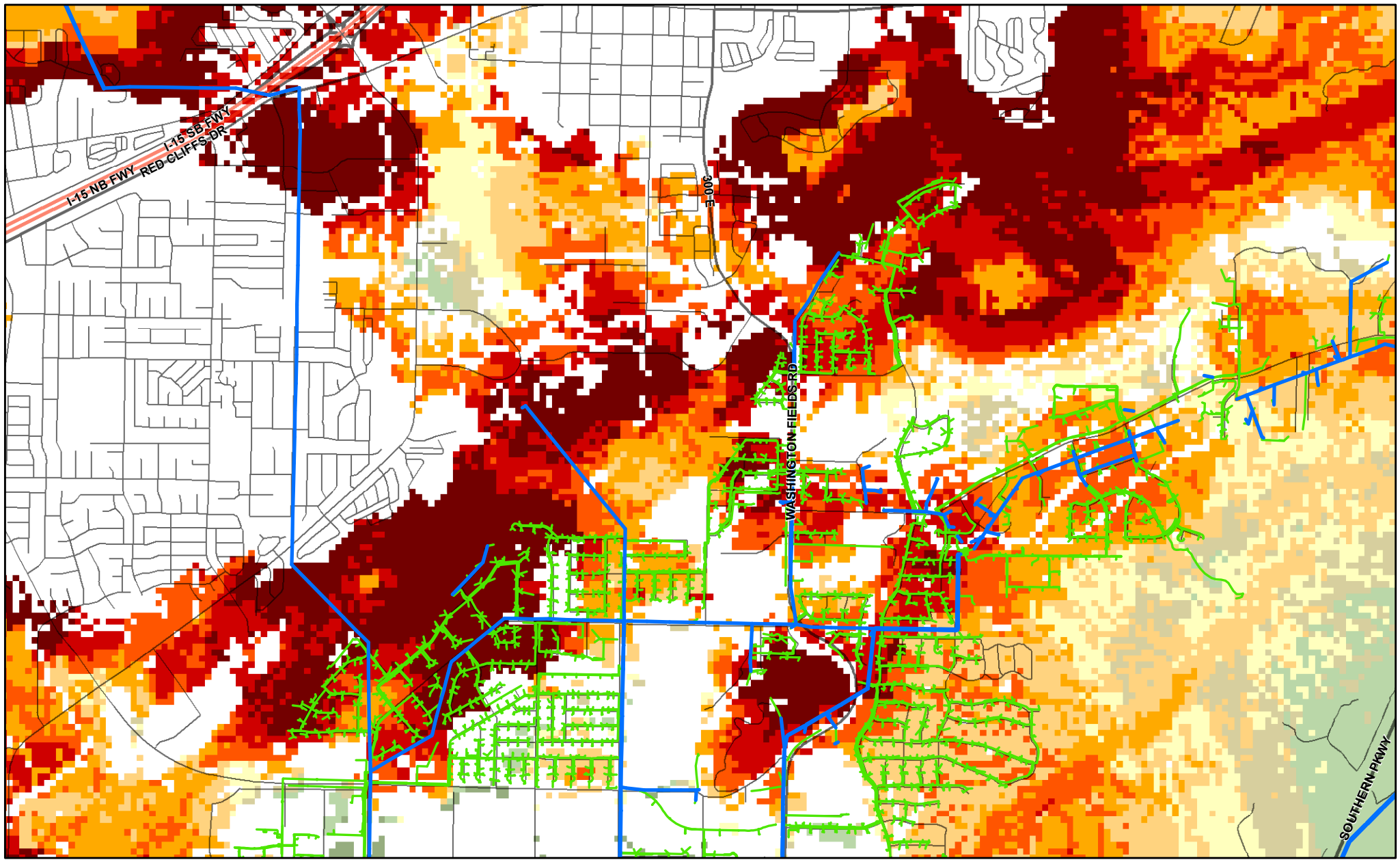
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 0.5 1 Miles

1 2 3 4

FIRE RISK INDEX - DIXIE HIGH THREAT AREAS PAGE 3



Overhead Powerline
Underground Powerline

Fire Risk Index

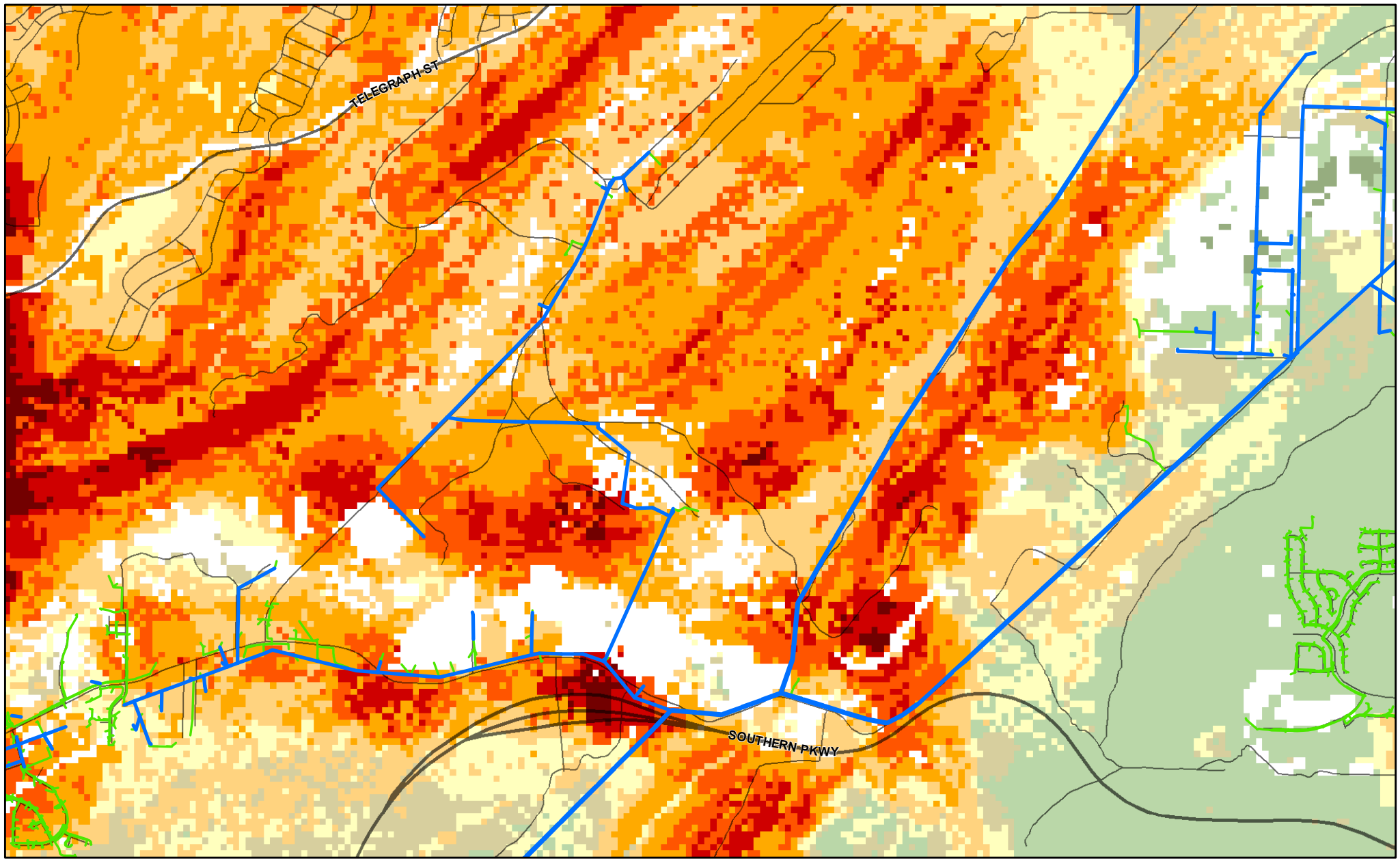
>= -1.1
-1.101 to -8.82
-8.821 to -15.2
-15.201 to -29.87
-29.871 to -65.1
-65.101 to -149.41
-149.411 to -315.72
-315.721 to -670.33
< -670.33

N

0 0.5 1 Miles

1 2 3 4

FIRE RISK INDEX - DIXIE HIGH THREAT AREAS PAGE 4



Overhead Powerline
Underground Powerline

Fire Risk Index

>= -1.1	-1.101 to -8.82	-8.821 to -15.2
-15.201 to -29.87	-29.871 to -65.1	-65.101 to -149.41
-149.411 to -315.72	-315.721 to -670.33	< -670.33

N

0 0.5 1 Miles

1 2 3 4

Appendix E: Inspection Rubrics for RESAP
Section 17: Overhead & Underground Lines, Equipment, etc.

Section 17: Overhead & Underground Lines, Equipment, etc.

1) Overhead and underground system circuit maps or files are available, and the master is updated every 3 months at a minimum.

Criteria:

- Procedures are in place for conveying system circuit changes to crews.
- System circuit maps or files are available in the maintenance and construction vehicles.
- Sufficient supplies of system circuit maps or pertinent sections are readily available for crews in case of emergency.
- Weekly updating of all electronic mapping information “evaluate as exceeds".

ref: NESC Section 442 Switching Control Procedures

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

2) Guy wires observed are in tension, and guys are marked for visibility.
ref: RUS BULLETIN 1724E-153 / NESC 217C

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

3) Observed construction and maintenance of lines and structures meet the applicable NESC standards and RUS specifications.
ref: NESC Section 214(A)(2); NESA Section 22 (Relations between various classes of line and equipment); NESC Section 23 (Clearances); RUS BULLETIN 1728F-804 / Bulletin 50-6

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

4) Right-of-ways observed are maintained and in good condition.
ref: NESC Section 218-A-1 (Vegetation Management)

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

5) UG riser installations observed meet applicable NESC, RUS specifications, and the following industry criteria.

Criteria:

- Cables are identified and tagged to correspond with the system's underground tagging and cable identification system.
- Riser installations are numbered or identified and consistent with the overall underground system.
- Riser installations have proper clearances and proper climbing space.

ref: NESC Section 36 (Risers); RUS Bulletin 50-6

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

6) UG transformers and enclosures are properly bolted and locked.
ref: NESC Section 381(G)(1)

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

7) Appropriate hazard identification signs are in place for underground transformers, cabinets, and enclosures.

Criteria:

- Permanent WARNING signs are displayed on outside of underground transformers and enclosures.
- Permanent DANGER signs are on the inside of underground transformers and enclosures.

ref: ANSI Z535 NESC 381(G)(2)

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

8) UG enclosures are marked with labels and cables and are labeled with suitable identification methods and/or durable tags to confirm the correct enclosure, to identify cables, to distinguish phases, etc., for utility worker safety during normal operation and troubleshooting activities.

Criteria:

- The identification information should match the same information shown on system maps.
- The identification method used should be durable and suitable for outside weather conditions.

ref: NESC Section 372 (Identification)

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

9) Underground facilities construction, maintenance, and clearances meet applicable NESC and RUS specifications.

Criteria:

- Enclosures are level and free of washouts, weeds, debris, and wildlife.
- Entrances to enclosures are unobstructed.

ref: NESC Section 311 (Installation and Maintenance); NESC Section 313(A)(2)

( ) Exceeds Requirements

( ) Satisfies All Requirements

( ) Partially Satisfies Requirements

( ) Fails to Satisfy Requirements

( ) N/A

Comments:

Section 17: Summary

The overall evaluation of the onsite field observation team for this section of the assessment is as follows:

Criteria

- Strong performance - Questions evaluated as exceeds or satisfies all requirements.
- Satisfactory performance - Questions evaluated as satisfies all requirements, could be a small number evaluated as exceeds.
- Generally satisfactory with minor areas for improvement - Questions evaluated as satisfies all or most requirements, improvement areas are minor.
- Key attention areas for improvement - Questions evaluated as partially satisfies or fails to satisfy requirements in important improvement areas.

( ) Strong Performance

( ) Satisfactory Performance

( ) Generally Satisfactory

( ) Key Attention Areas for Improvement

( ) N/A

Comments:

Appendix F: Right of Way and Vegetation Management Standards

7 CFR Part 1728: Bulletin 1728F-804 (overhead distribution line), Section M, Specifications for Right-Of-Way Clearing

The right-of-way shall be prepared by removing trees, clearing underbrush, and trimming trees so that the right-of-way is cleared close to the ground and to the width specified. However, low growing shrubs, which will not interfere with the operation or maintenance of the line, can be left undisturbed if so directed by the property owner. Slash may be chipped and blown on the right-of-way if so allowed. Trim, but do not remove shade, fruit, or ornamental trees unless otherwise authorized.

All trimming shall be done using good arboricultural practices.

The landowner's written permission is usually required prior to cutting trees outside of the right-of-way. Trim trees fronting each side of the right-of-way symmetrically unless otherwise specified. Remove dead trees beyond the right-of-way which would strike the line in falling. Also, either remove or top leaning trees beyond the right-of-way that would strike the line in falling.

7 CFR Part 1728: Bulletin 1728F-811, (Transmission Lines) Page 2-1

2. CLEARING

2.1 General Requirements

2.1.1 Clearing units specified may cover full width right-of-way clearing, selective clearing, tree topping, spraying of herbicides, or other forms of right-of-way preparation. Only those areas shown on the drawings or specified by the engineer shall be cleared in accordance with the applicable clearing units. Isolated ("danger") trees to be removed will be marked in the field by the engineer.

2.1.2 Only such vegetation should only be removed as necessary to permit construction, operation, and maintenance of the transmission line. Care must be taken to prevent denuding of ground cover and erosion of the soil.

2.2 Clearing Methods and Equipment

2.2.1 Unless otherwise specified, all timber to be cleared must be felled. The removal of brush must be in a manner so as to reduce the overall impact on the root structure of the ground cover.

2.2.2 Equipment must be in good repair and appropriate for the types of clearing specified.

2.2.3 When specified in the right of-way construction units, stumps left in place must be treated with a heavy application of an appropriate herbicide approved by the engineer. Chemical treatment of stumps must occur as soon as possible after cutting. The chemical application must be sufficient to saturate the entire above ground surface of the stump and cause a small amount to run down the sides and collect at the base to penetrate below the ground line into the roots. Any stumps showing resurgent growth prior to completion of line construction must be treated to kill all such growth

2.2.4 Chemical sprays or herbicides must only be used with the approval of the engineer, and only in areas so designated for their use. Herbicides must be applied in accordance with the manufacturer's recommendations and only by a licensed/certified applicator. The chemical sprays and herbicides must meet the environmental requirements of all governing agencies.Spraying must be performed in such manner, at such pressure, and under such wind conditions that drift of spray material to adjacent plants, animals, or persons will be avoided.

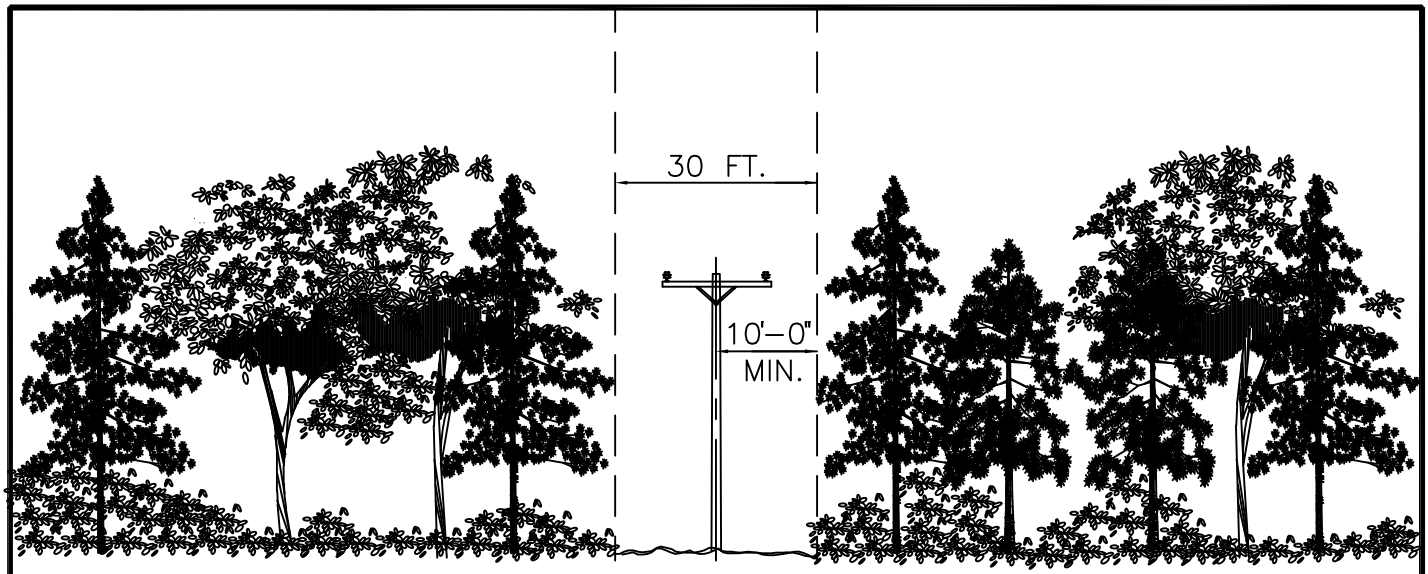
Such application must not be made: a) when the ground is continuously frozen; b) adjacent to streams or other water bodies; c) when the ground is or may be flooded during the period in which the herbicide retains its toxicity; or d) in a marsh or other wetland.

2.2.5 If required by the "Special Requirements" paragraph below, stumps must be removed.

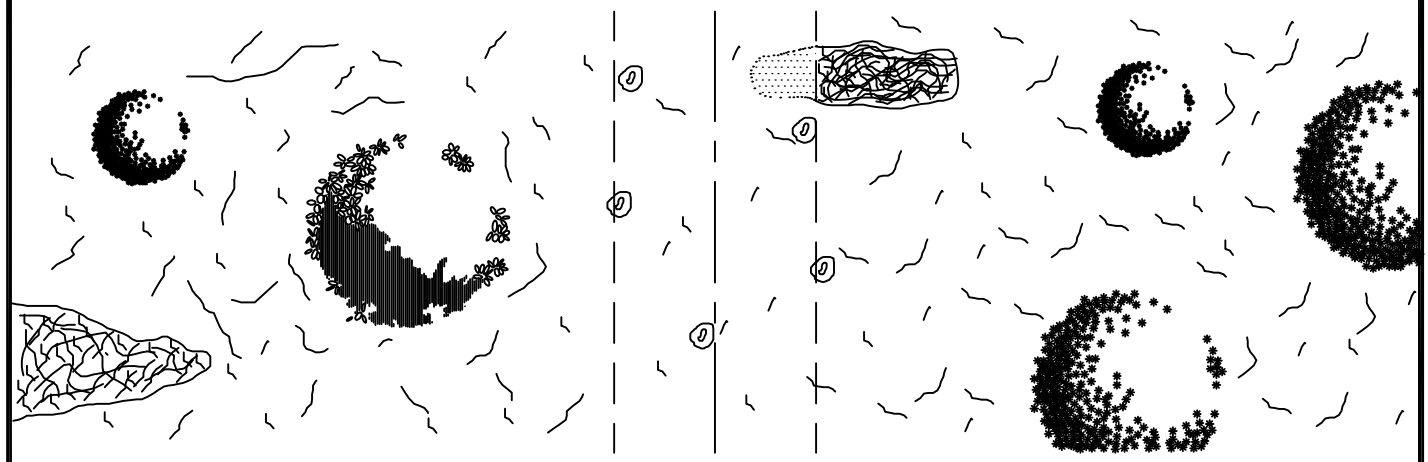
2.2.6 The landowner's written permission must be received prior to cutting trees outside the right-of-way.

2.2.7 Disposal of trees, brush, branches, and refuse must be in accordance with the methods specified in the construction units.

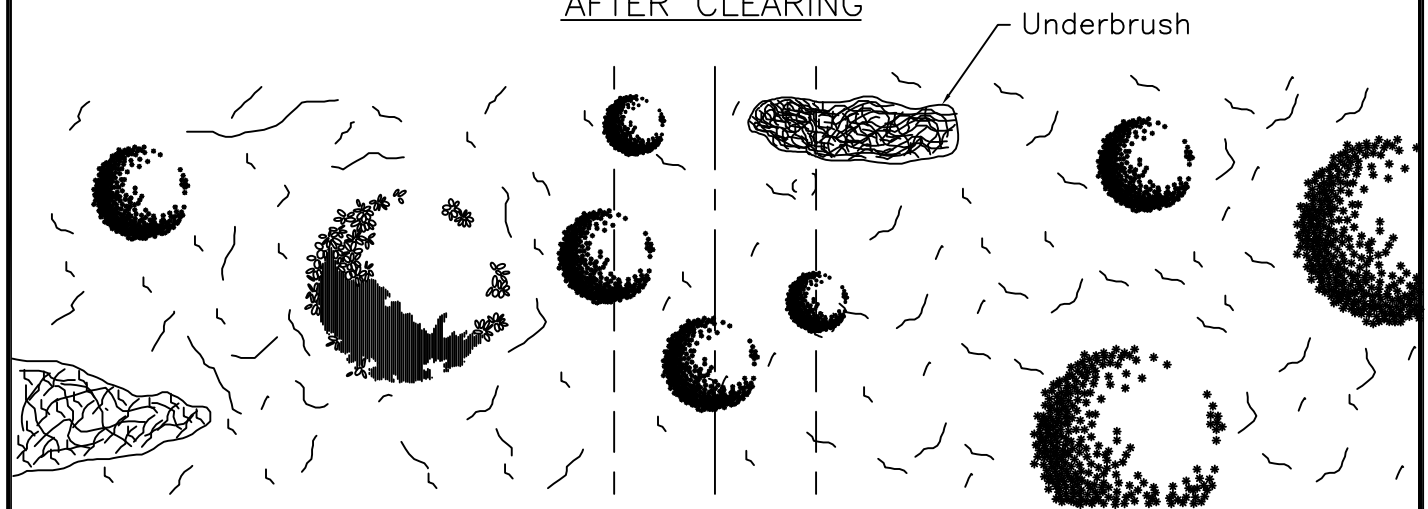
2.2.8 Avoid clearing vegetation in riparian areas to the extent possible. A vegetative buffer zone should be left along creeks and streams to minimize siltation and sedimentation and prevent adverse impacts to riparian habitat.



ELEVATION



AFTER CLEARING



BEFORE CLEARING

NOTE:
Change suffix of drawing number to designate clearing width. (e.g. M1.30G specifies 30 foot wide clearing).

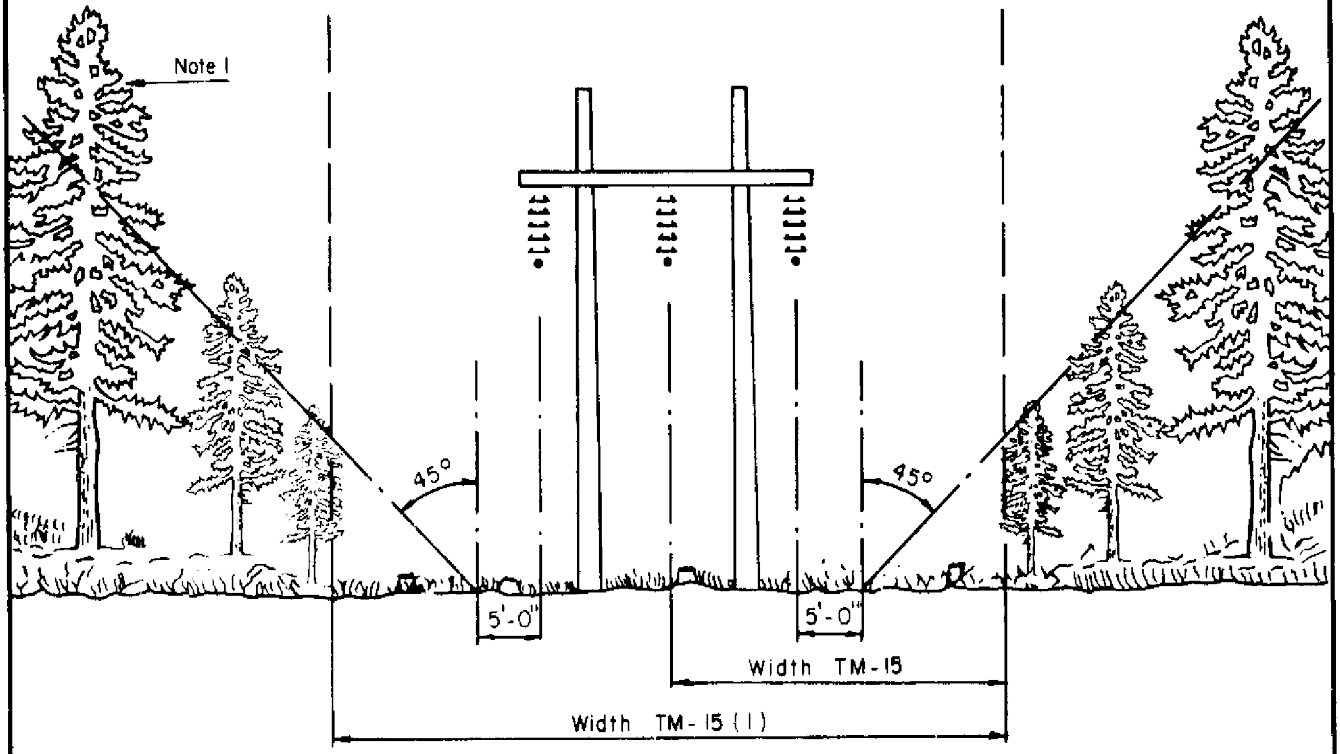
RIGHT–OF–WAY CLEARING GUIDE

APRIL 2005 RUS		M1.30G (R1)

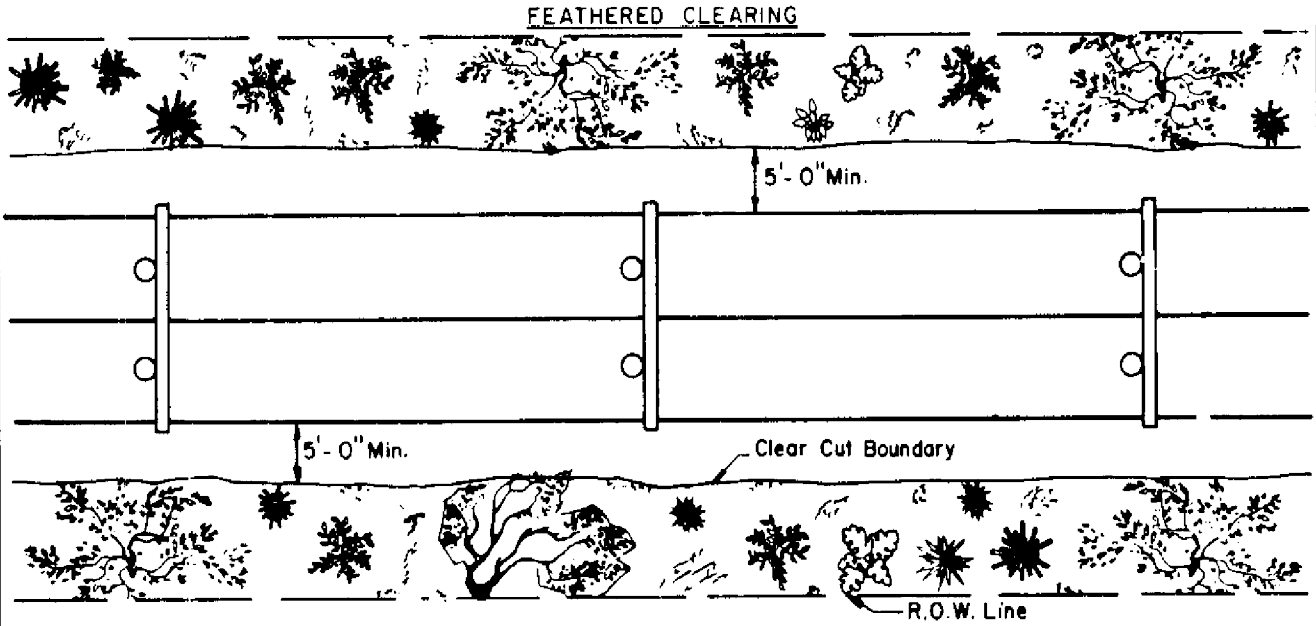
NOTES:

1. Engineer shall designate all danger trees which are to be removed or topped. The unit for clearing danger trees is "TM-13."

2. The unit for clearing right-of-way of specified width is "TM-15" or "TM-15(1)."



FEATHERED CLEARING



PLAN VIEW

TRANSMISSION ROW CLEARING

FEATHERED/CLEAR-CUT CLEARING

Aug. 1996

TM-15,15(1),13

Appendix G: Wildland Fire Prevention/Response Procedure

Before each fire season, in late April/early May, depending on the weather and precipitation, Dixie Power will send out individual linemen to each line fuse pole in known high-risk/dried grass locations (see the red dots on the Fire Risk maps in Appendix D) to clear out the brush or any other potential fire hazard manually, and to apply herbicides and soil sterilant to prevent vegetation regrowth, unless prohibited by local land owner or land manager. Note: this does not include transformer fuses on overhead lines, which are very small and are of a different characteristic, which expel significantly less hot gas, and therefore are much less likely to be involved in any wildland fire events. This specific and targeted round of clearing is to be done each year.

Out of an overabundance of caution, in response to any sustained outage during the "dry summer months" of June through the end of September (or until the monsoon season, which often starts in July,) operations crews will not replace and re-energize blown fuses until they have driven the line downstream from the fuse to ensure that there are no conductors on the ground or among any dry vegetation and thus avoid starting a wildland fire. Also, after any line recloser locks out, the line crew will try the recloser only once before driving the length of the circuit for the same reasons.

The safety of Dixie Power personnel and the general public is always the first priority, so if a Dixie Power lineman were to discover an active fire involving or even near a cooperative powerline they are instructed to evacuate if necessary and then to phone:

- In case of emergency: 911
- In case of non-emergency:
    - In Washington County: 435-627-4301
    - In Iron County: 435-867-7550

All cooperative line vehicles are equipped with a two-way radio and each lineman is equipped with a cell phone, so the lineman can either call the appropriate number directly with his cell phone or use his radio to contact the dispatcher who would then place the phone call to the appropriate entity. In one area of the cooperative, in Pinto Canyon between Newcastle and Pine Valley, there is neither cell nor radio coverage; for that location the line crews working in that area will carry a satellite phone which has been used with success in the past.

If the fire fighters need sources of water for helicopter dipping, they will be directed to the following reservoirs (listed north to south) in or near the Dixie Power certificated area, in Iron and Washington Counties:

- Newcastle Reservoir, N37°38'58.02" W113°31'27.49"
- Enterprise Reservoir, N37°31'5.65" W113°51'55.87"
- Grass Valley Reservoir, N37°24'55.87" W113°29'51.26"
- Pine Valley Reservoir, N37°22'44.13" W113°28'30.27"
- Baker Reservoir, N37°22'39.38" W113°38'22.27"
- Upper Sand Cove Reservoir, N 37°18'7.30" W113°41'51.14"
- Gunlock Reservoir, N37°15'32.68" W113°46'28.33"
- Quail Creek Reservoir, N 37°11'19.33" W113°23'14.76"

- Sand Hollow Reservoir, N 37° 6'41.60" W 113°22'35.34"

In addition to Dixie's powerlines, there is an external hazard that could create an additional level of urgency in the case of a wildland fire: the Kern River natural gas pipeline crosses Dixie's powerlines on the east side of Newcastle, in Iron County. In case of a wildfire near Newcastle, the pipeline operator will be contacted at: 800-272-4817

If a wildfire were to destroy a segment of Dixie Power's lines, as in the case of the North Fire in 2017, Dixie Power crews will await clearance from the fire incident commander and when the clearance is given the crews will immediately start reconstructing the damaged lines, upgrading the line as necessary. See: "**RUS Bulletin 1730B-2 Guide for Electric System Emergency Restoration Plan**."

Appendix H: Revision Tracking

1. 03/26/2020 – Outline based on Utah Code 54-24-203
2. 04/23/2020 – First draft of narrative prepared in-house at Dixie Power
3. 05/01/2020 – Substantially completed draft, incorporating comments from other Dixie Power staff, and subsequently approved by Dixie Power Board of Directors on May 6, 2020
4. 05/11/2020 – Draft incorporating comments from Utah DNR and submitted to SWCA on May 11, 2020
5. 06/15/2020 – Draft incorporating comments from SWCA on May 15, 2020 and submitted to USFS on June 15, 2020
6. 06/22/2020 – Draft incorporating comments from USFS and submitted to General Public via website on June 22, 2020
7. 06/29/2020 – Final version 1 incorporating all comments and filed with Utah Public Service Commission
8. 2023 – Version 2 to be created and filed with Utah PSC