Appendix 12-D
Breeding Bird and Marsh Bird Survey Report

Chateaugay Wind Repowering Project
Matter No. 23-03031

REDACTED

GRASSLAND BREEDING BIRD AND MARSH BIRD SURVEYS

CHATEAUGAY WIND REPOWERING PROJECT TOWN OF CHATEAUGAY, FRANKLIN COUNTY, NEW YORK

VALCOUR CHATEAUGAY NEWCO, LLC

PROJECT NO.: US-WSP-31403295.029-B6171
DATE: AUGUST 2024

WSP USA INC.
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LIST OF ABBREVIATIONS AND ACRONYMS

BBS	Breeding bird surveys
Chateaugay NewCo	Valcour Chateaugay NewCo LLC
MBS	Marsh bird surveys
NYSDEC	New York State Department of Environmental Conservation
ORES	Office of Renewable Energy Siting
Project	Chateaugay Wind Repowering Project
WSP	WSP USA Inc.

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1 INTRODUCTION

1.1 BACKGROUND

Valcour Chateaugay NewCo LLC (Chateaugay NewCo) is proposing to repower and operate the Chateaugay Wind Repowering Project (Project), located in the Town of Chateaugay, in Franklin County, New York. Figure 1-1 presents the proposed Project Boundary at the time of the breeding bird surveys (BBS). Throughout this document, "Study Area" refers to project parcels that form a general boundary around the site, while "Project Boundary" refers to the specific areas of the Project construction limit of disturbance with a surrounding 100-foot buffer, according to the current construction plan.

WSP USA Inc. (WSP) conducted BBS in the Study Area from May 1, 2024, to July 19, 2024. A breeding bird study plan was submitted to the Office of Renewables Energy Siting (ORES) in compliance with 19 New York Codes, Rules and Regulations § 900-1.3(g) on April 12, 2024 (WSP 2024a). ORES reviewed the study plan, which was prepared consistent with the New York State Department of Environmental Conservation (NYSDEC) *Survey Protocol for State-listed Breeding Grassland Bird Species* (NYSDEC 2022). ORES provided comments on April 30, 2024. WSP provided a response to comments via email to ORES on May 6, 2024.

In addition, a marsh bird survey (MBS) was conducted from May 31 through June 27, 2024, in accordance with the *Standardized North American Marsh Bird Monitoring Protocols* (Conway 2011). The marsh bird survey methods are outlined in the study plan (WSP 2024b) for the project that was submitted to ORES in compliance with 19 New York Codes, Rules and Regulations § 900-1.3(g) in April 2024.ORES reviewed the study plan and did not have any comments. Three survey periods of morning marsh bird surveys were conducted between May 31, 2024, and June 27, 2024.

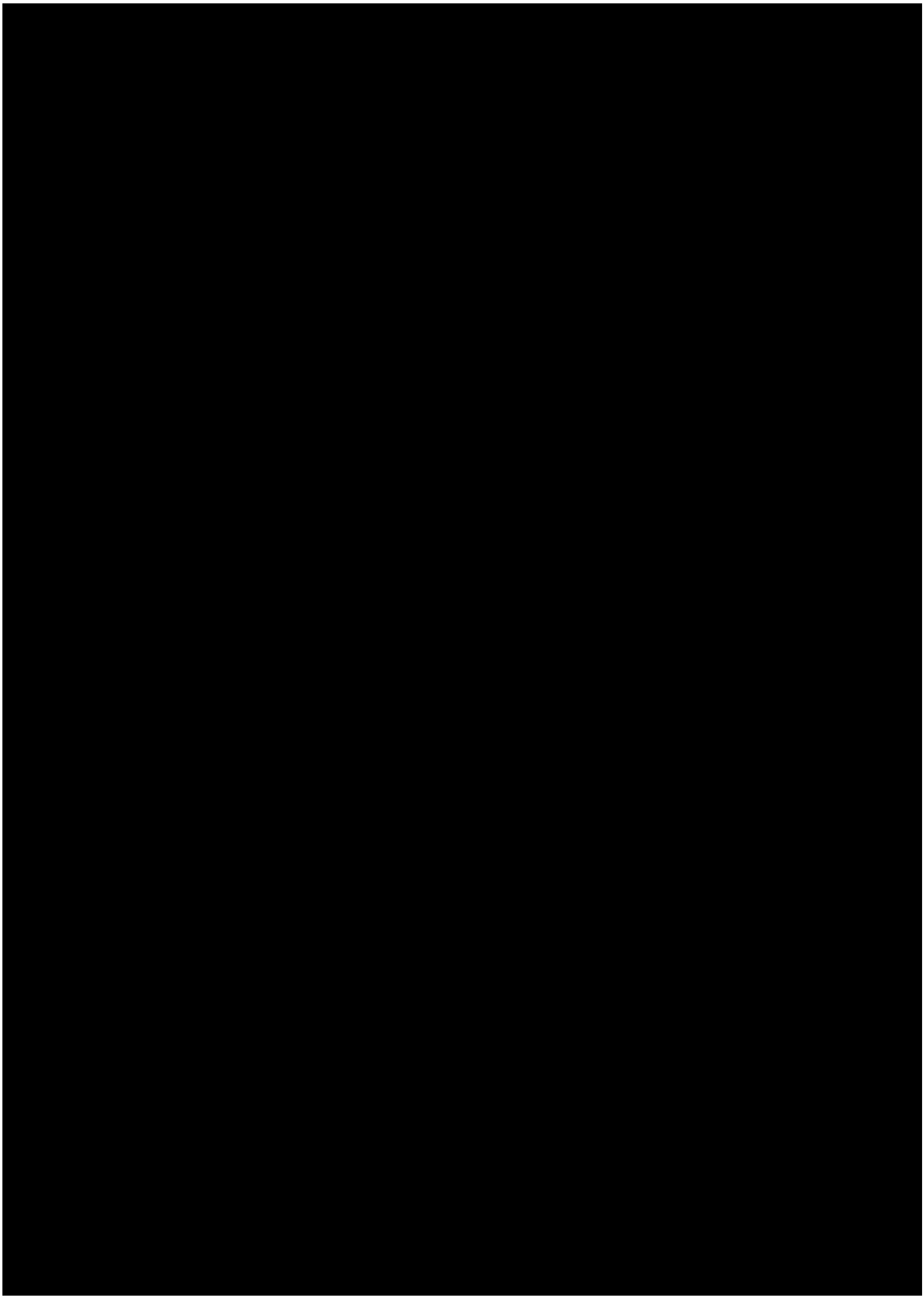
The objectives of the breeding bird and marsh bird surveys were as follows:

1. To determine the presence of, and sites used by, New York State-listed threatened and endangered grassland bird and focal marsh bird species during the breeding season.
2. Collect information on the species richness and abundance of breeding grassland bird species and marsh bird species in the Study Area.
3. Document particular areas used by State-listed grassland bird species and State-listed marsh bird species within the Study Area.
4. Report the baseline data resulting from surveys.
5. While it is not a direct objective of the survey or the report, it is understood that the data will be used to review whether suitable or occupied habitat for bird species listed as threatened or endangered by New York State or the U.S. Fish and Wildlife Service is identified within the Study Area as part of the ORES Article VIII application process.

The methodology and results of the 2024 BBS and MBS efforts are summarized in this report.

1.2 STUDY AREA

The Study Area comprises project parcels that contain the proposed Project Boundary. The Study Area encompasses approximately 6,617 acres in Franklin County, New York, with the Project Boundary encompassing approximately 810 acres. Figure 1-1 depicts the boundaries of the Project Boundary, Study Area, and the land cover types within these areas. The elevation within the Study Area is approximately 1,260 feet (384 meters) above sea level. Based on data from the 2021 National Land Cover Database, most of the land cover within the proposed parcels is composed of deciduous forest (approximately 32 percent) and cultivated crops (approximately 24 percent) (USGS 2021). Other dominant land cover types throughout the Study Area include hay/pasture (17 percent), woody wetlands (8 percent), mixed forest (7 percent), and evergreen forest (6 percent). The remaining habitat types (e.g., barren land, developed spaces, emergent herbaceous wetlands, herbaceous, open water, and scrub/shrub) each consist of less than two percent of the Study Area acreage. Site reconnaissance is consistent with the 2021 National Land Cover Database dataset.



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2 METHODS

The primary focus of the BBS and MBS were to determine the presence and site use by New York State-listed threatened, endangered, and species of special concern grassland bird species (see Table 2-1) and focal marsh bird species (see Table 2-2) during the breeding season. The BBS and MBS are part of the pre-application review by ORES in compliance with 19 New York Codes, Rules and Regulations § 900-1.3(g)(4).

2.1 STUDY DESIGN

GRASSLAND BREEDING BIRD SURVEYS

Seventy-seven point count locations were originally identified in the study design, but point B39 was removed from the study due to being in inappropriate habitat (forested area with a dense young tree stand). The remaining seventy-six point count locations were established in areas of suitable grassland within parcels in the Study Area. The number of point count locations was determined per accessible parcel by placing a point for every 25 acres (10 hectares) of suitable grassland habitat within new disturbance areas within the Project. A minimum distance of 250 meters (820 feet) in all directions was provided between point counts and point count locations were placed to cover open habitat throughout the entire Study Area. The study encompassed habitats that are generally representative of new disturbance areas in the Study Area.

Due to sightings of [redacted] BBS points were subsequently surveyed approximately weekly between May 14, 2024 and July 19, 2024 (WSP 2024a). Of the 56 BBS points, 54 were surveyed for a total of ten survey periods and two were surveyed for nine survey periods due to vegetation height of row crop (corn) being greater than 3 feet in the last period, making the BBS points inaccessible. For the remaining 20 BBS points, 18 were surveyed for eight survey periods and two were surveyed for only seven periods due to vegetation height in row crop (corn) being greater than 3 feet in the last period, making the BBS points inaccessible. Figure 2-1 presents a map of grassland breeding bird survey locations and their viewsheds.

MARSH BIRD SURVEYS

Two marsh bird survey point locations were established in representative wetland habitat where project components may potentially approach areas suitable for marsh birds (see Figure 2-1). Each point was spaced approximately 400 meters apart to avoid potential double counting of individuals. The two marsh bird survey point locations were surveyed for three periods: one visit in May and two visits in June, for a total of six survey days.

2.2 FIELD METHODS

2.2.1 SITE CHARACTERIZATION

Survey methods for site characterization at each breeding bird survey point count location were established in accordance with the NYSDEC *Survey Protocol for State-listed Breeding Grassland Bird Species* (NYSDEC 2022). Survey methods for site characterization at each marsh bird point were established in accordance with the *Standardized North American Marsh Bird Monitoring Protocols* (Conway 2011).

GRASSLAND BREEDING BIRD SURVEYS

Site description information for each point count location was collected separately and included habitat type, management practices (e.g., timing of hayfield mowing), distance from the nearest

road, distance from hedgerow or forest, distance to nearest shrub, and vegetation measurements in a 25-meter (82-foot) radius from the survey point. Vegetation measurements included percent cover of each vegetation type (i.e., grass, forb, woody, and bare ground), dominant grass and dominant forb, and litter depth. A Robel pole was used to measure vegetation density from four cardinal directions and then averaged. Average plant height was measured using a meter stick.

MARSH BIRD SURVEYS

Site description information for marsh bird points was collected separately and included wetland classification (e.g. PEM, PSS, PFO), wetland permanency, water depth, percent of dispersion pattern, and marsh edge habitat type. Vegetation measurements included percent vegetation cover (e.g. open water, trees, scrub-shrub, emergent plants), percent of dominant plant species (including invasive species) and estimated average marsh vegetation height.

2.2.2 BIRD SURVEYS

GRASSLAND BIRD SURVEYS

Survey methods to assess breeding grassland bird use and distribution at the Study Area were established in accordance with the grassland breeding bird study plan (WSP 2024a).

At each point count location, the avian biologist surveyed for a period of five minutes after an initial one to two minutes of silence following their arrival at the survey point to allow birds to recover from any disturbance. Birds observed or heard within approximately 100 meters (328 feet) were recorded. Surveys were conducted between one-half hour before sunrise until 10:30 a.m. On rare occasions a survey was conducted after 10:30 a.m. Morning surveys were conducted at each point count location once per survey period with approximately one week between surveys. Surveys were generally not conducted during inclement weather (e.g., rain) or on days with sustained, strong winds (i.e., greater than 12 miles per hour), although some breeding bird surveys experienced periods of precipitation or maximum winds greater than 12 mph. [redacted] was not identified as a potential target species for the Study Area; [redacted]

The surveyor recorded the following data at each point count location: start and end time for each survey; weather information (i.e., temperature, wind speed, wind direction, and cloud cover); a note on habitat if appropriate (e.g., whether recently mowed); bird species identification; number of individuals per species within 100 meters; how the species was detected (visual or auditory); breeding behavior (e.g., carrying food or nest material, courtship behavior, territorial defense, singing) using New York Breeding Bird Atlas breeding codes (NYSDEC 2024); and any additional pertinent notes. Birds detected over 100 meters from the observer, between survey points during the meander survey, and flyover species were recorded separately from birds detected within 100 meters.

For any federally and/or state-listed threatened or endangered species documented in the Study Area (including incidental observations), the following information was recorded: date, time, behavior observed, perch locations, potential or confirmed nest locations, foraging areas, flight paths, and flight height mapped on aerial photographs.

MARSH BIRD SURVEYS

Survey methods to assess breeding marsh bird use and distribution at the Study Area were established in accordance with the marsh bird survey study plan (WSP 2024b). Three survey periods were conducted approximately bi-weekly between May 15 and June 30, 2024 (one visit in May and two visit in June, for a total of 6 survey days), during the period of peak activity of the marsh bird breeding season. Surveys were conducted in the morning between a half hour (30 minutes) before sunrise until no later than three hours after sunrise. Similar to grassland bird surveys, marsh bird surveys did not take place during inclement weather. The two marsh bird points were surveyed prior to conducting grassland breeding bird surveys.

Marsh bird surveys included a 5-minute passive period prior to broadcasting recorded calls. After the 5-minute passive period, a speaker broadcasted calls for 30-seconds of a focal marsh breeder that may be potentially found in the area, followed by 30 seconds of silence, followed by calls of the next species. The broadcast calls included vocalizations of [redacted] All birds observed or heard were recorded. Similar to grassland bird surveys, at each point count station the surveyor recorded start and end time; weather information; species identification; number of individuals per species; how the species was detected (visual or auditory); breeding behavior; and any additional pertinent notes. For any federally and/or state-listed threatened or endangered species detected, locations were mapped on aerial photographs along with recording other notes.

2.3 DATA ANALYSIS

Following each survey day, data were entered for future analysis into an Excel spreadsheet. Prior to any analysis, the data were checked for accuracy and completeness.

Data were analyzed from each point count location using species richness and relative abundance as a baseline analysis for the area. Abundance was calculated as the number of observations for each species and the total for the entire survey. Species composition was generated as a list of species observed, while species diversity was the number of species identified by point count location for the entire survey period. Relative abundance was calculated as the proportion of the number of each species relative to total bird observations for the survey period (birds per survey location). Species frequency was calculated as the percent of surveys in which each species was identified.

Spatial use was investigated by comparing the abundance and species diversity by location. Abundance of each species was also grouped by point count survey location and by survey period.

2.4 INCIDENTAL OBSERVATIONS

Incidental observations included bird species that were observed or heard either outside the 100-meter survey radius from grassland survey points, flyover detections, or detected outside of the 5-minute timeframe of surveys. The surveyor recorded the species and number for these incidental bird observations, provided such observations did not detract from the detection of

birds within the 100-meter survey radius. Incidental observations for marsh bird surveys included bird species observed or heard outside of the 11-minute timeframe of the broadcast surveys.

Consistent with the NYSDEC protocol, detailed information on incidental observations of threatened and endangered species are included in this report. The incidental data were not used in the final quantitative analysis.

2.5 SPECIES OF CONCERN

All federally and/or state-listed threatened and endangered species and species of special concern were identified and recorded, along with their listing status, number observed, survey point, approximate location and/or flight path, and date and time observed.

Shapefiles of point count survey locations and any detections of all federally and/or state-listed threatened and endangered species were provided separately.

2.6 WEATHER CONDITIONS

Surveys were completed during appropriate weather conditions to allow target species to be detected. Surveys were not generally conducted during periods of precipitation, fog, or sustained, strong winds (i.e., wind speeds greater than 12 miles per hour), although some breeding bird surveys experienced periods of precipitation or maximum winds greater than 12 mph.

Weather data, including temperature, cloud cover, and wind speed and direction were recorded at the start of each survey. Temperature was measured with a car thermometer or the Wunderground weather application. Wind speed and wind direction were recorded using the Wunderground application. Cloud cover was estimated by the surveyor before starting the survey at each point.

2.7 QUALITY ASSURANCE AND QUALITY CONTROL

Field staff were responsible for reviewing their data forms for completeness, accuracy, and legibility at the end of each survey date. The data were regularly reviewed by the project manager for quality assurance. Irregular or potentially questionable data were flagged and discussed with field personnel.

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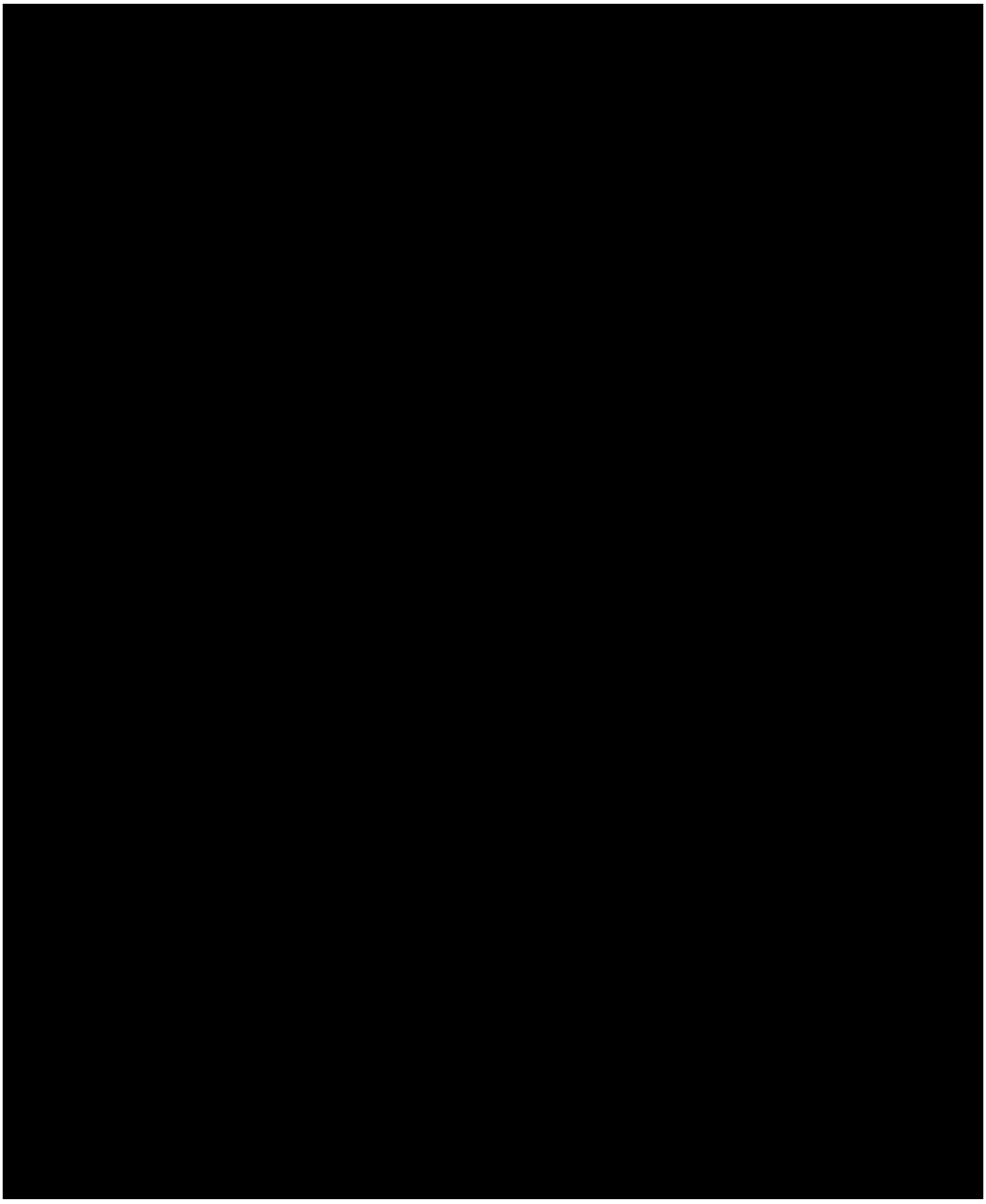

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3 RESULTS

3.1 SURVEY DATA OVERVIEW

A total of 716 grassland point count surveys (59.6 hours of survey effort) were conducted from May 19, 2024 through July 19, 2024, during which 1,760 detections of 62 species were recorded within the 100-meter survey radius from each survey point. There were three New York State-listed threatened species were detected during BBS consisting of [redacted] (see Section 3.7).

Due to sightings of [redacted] 56 BBS points were surveyed twice in the first two weeks of May per NYSDEC protocol (NYSDEC 2022). BBS points were subsequently surveyed approximately weekly between May 14, 2024 and July 19, 2024 (WSP 2024a). Of the 56 BBS points, 54 were surveyed for a total of ten survey periods and two (B15 and B69) were surveyed for nine survey periods due to vegetation height of row crop (corn) being greater than 3 feet in the last period, making the BBS points inaccessible. For the remaining 20 BBS points, 18 were surveyed for eight survey periods and two (B70 and B71) were surveyed for only seven periods due to vegetation height in row crop (corn) being greater than 3 feet in the last period, making the BBS points inaccessible. Survey dates are provided in Table 3-1.

Six marsh bird point count surveys (11minutes each, totaling 1.1 hours of survey effort) were conducted May 31 through June 27, 2024, during which 32 detections of 11 species were recorded during surveys. There were two marsh bird survey points. No focal marsh bird species were detected during surveys.

The full dataset of species, numbers, locations, dates, times, stationary versus incidental detections, and breeding codes are recorded for bird observations during all surveys and are presented in Appendix A.

Table 3-1 Survey Dates for Breeding Bird Surveys at the Chateaugay Wind Repowering Project in 2024

Survey Period	Dates	Number of Grassland Points Surveyed	Number of Marsh Points Surveyed
1	5/1, 5/2, 5/3	56	0
2	5/7, 5/8, 5/9	56	0
3	5/14, 5/16, 5/17, 5/21, 5/22	76	0
4	5/23, 5/29, 5/30, 5/31	76	2
5	6/4, 6/5, 6/6, 6/7 6/8	76	0
6	6/11, 6/12, 6/13, 6/14	76	0
7	6/17, 6/18, 6/19, 6/20, 6/21, 6/25	76	2
8	6/25, 6/26, 6/27, 6/28	76	2
9	7/2, 7/3, 7/9, 7/10, 7/11	76	0
10	7/12, 7/13, 7/16, 7/17, 7/18, 7/19	72	0

Table 3-1 Survey Dates for Breeding Bird Surveys at the Chateaugay Wind Repowering Project in 2024

Survey Period	Dates	Number of Grassland Points Surveyed	Number of Marsh Points Surveyed
Total		**716**	**6**

Note: The following points were surveyed the first two weeks of May due to the presence of [redacted] Points B15, B69, B70, and B71 were not surveyed in the last period due to vegetation height of row crop (corn) being greater than 3 feet, making the BBS points inaccessible.

3.2 SITE CHARACTERIZATION DATA

Out of the 76 survey points that were visited, 47 were classified as row crop, 18 were classified as hayfield, five were classified as field crop, two were classified as old field, two were classified as pasture, and two were classified as scrub-shrub (see Table 3-2). Survey points were dominated by a mix of grass species and forbs. Grasses dominated at 64-point count survey locations and included reed canary grass (*Phalaris arundinacea*), orchard grass (*Dactylis glomerata*), timothy grass (*Phleum pratense*), smooth brome (*Bromus inermis*), corn (*Zea mays*), common oat (*Avena sativa*), and Kentucky bluegrass (*Poa pratensis*). Forbs dominated at 12-point count survey locations and included alfalfa (*Medicago sativa*), soybean (*Glycine max*), and goldenrod (*Solidago* spp.). Site characterization data are presented in Appendix B.

Table 3-2 Vegetation Types at each Survey Point for Chateaugay Wind Repowering Solar Project in 2024

Survey Point	Vegetation Type	Dominant Plant	Average Vegetation Height (cm)[1]	Date Measured	Time of Mowing
B1	Pasture	Reed Canary Grass	55	6/25/2024	Moderately grazed for duration of surveys.
B2	Pasture	Orchard Grass	39	6/25/2024	Moderately grazed for duration of surveys.
B3	Hayfield	Alfalfa	41	6/25/2024	Mowed before 6/12/24.
B4	Hayfield	Alfalfa	45	6/4/2024	Mowed before 6/12/24.
B5	Hayfield	Alfalfa	40	6/25/2024	Mowed before 6/12/24.
B6	Hayfield	Orchard Grass	70	6/4/2024	Mowed before 6/5/24.
B7	Hayfield	Orchard Grass	97	6/11/2024	Mowed before 6/5/24.
B8	Hayfield	Orchard Grass	28	6/11/2024	Mowed before 6/5/24.
B9	Hayfield	Alfalfa	24	7/16/2024	Mowed before 6/5/24.
B10	Hayfield	Orchard Grass	52	6/11/2024	Mowed before 6/5/24.
B11	Hayfield	Alfalfa	18	6/11/2024	Mowed before 6/5/24.
B12	Row Crop	Soybean	34	7/9/2024	Row crop. No-till farming.
B13	Other - Field Crop	Common Oat	80	7/9/2024	Planted to oats before the survey period.
B14	Other - Field Crop	Common Oat	75	7/9/2024	Planted to oats before the survey period.
B15	Row Crop	Corn	95	7/9/2024	Tilled before 5/23/2024.
B16	Other - Field Crop	Common Oat	98	7/9/2024	Planted to oats before the survey period.
B17	Row Crop	Soybean	36	7/9/2024	Row crop. No-till farming.

Table 3-2 Vegetation Types at each Survey Point for Chateaugay Wind Repowering Solar Project in 2024

Survey Point	Vegetation Type	Dominant Plant	Average Vegetation Height (cm)[1]	Date Measured	Time of Mowing
B18	Hayfield	Timothy	32	7/18/2024	Mowed during survey period.
B19	Hayfield	Kentucky Bluegrass	85	6/12/2024	Mowed during survey period.
B20	Hayfield	Alfalfa	26	7/18/2024	Mowed during survey period.
B21	Hayfield	Orchard Grass	74	6/4/2024	Mowed during survey period.
B22	Row Crop	Corn	185	7/17/2024	Tilled. Planted to corn in spring.
B23	Row Crop	Corn	165	7/17/2024	Tilled. Planted to corn in spring.
B24	Row Crop	Corn	155	7/17/2024	Tilled. Planted to corn in spring.
B25	Row Crop	Corn	93	7/17/2024	Tilled before 6/5/24.
B26	Row Crop	Corn	95	7/17/2024	Tilled before 6/5/24.
B27	Row Crop	Corn	104	7/17/2024	Tilled before 6/5/24.
B28	Row Crop	Corn	94	7/17/2024	Tilled before 6/5/24.
B29	Row Crop	Corn	94	7/17/2024	Tilled before 6/5/24.
B30	Row Crop	Corn	95	7/17/2024	Tilled before 6/5/24.
B31	Row Crop	Corn	76	7/18/2024	Tilled. Planted to corn in spring.
B32	Row Crop	Corn	77	7/18/2024	Tilled. Planted to corn in spring.
B33	Row Crop	Corn	87	7/18/2024	Tilled. Planted to corn in spring.
B34	Row Crop	Corn	97	7/18/2024	Tilled. Planted to corn in spring.
B35	Row Crop	Corn	115	7/18/2024	Tilled. Planted to corn in spring.
B36	Row Crop	Corn	135	7/17/2024	Tilled. Planted to corn in spring.
B37	Row Crop	Corn	185	7/17/2024	Tilled. Planted to corn in spring.
B38	Row Crop	Corn	105	7/17/2024	Tilled before 6/5/24.
B40	Scrub-Shrub	Timothy Grass	83	6/26/2024	Unmanaged field reverted to scrub-shrub.
B41	Row Crop	Soybean	23	7/19/2024	Tilled. Planted to soybeans in late spring
B42	Hayfield	Orchard Grass	91	6/13/2024	Unmanaged for duration of study.
B43	Hayfield	Orchard Grass	66	6/25/2024	Mowed before 7/2/24.
B44	Hayfield	Timothy Grass	64	6/25/2024	Mowed before 7/2/24.
B45	Hayfield	Orchard Grass	95	6/25/2024	Mowed before 7/2/24.
B46	Hayfield	Orchard Grass	14	6/11/2024	Mowed before 7/2/24.
B47	Row Crop	Corn	90	7/16/2024	Tilled. Planted to corn in spring.
B48	Row Crop	Corn	87	7/16/2024	Tilled. Planted to corn in spring.
B49	Row Crop	Corn	105	7/16/2024	Tilled. Planted to corn in spring.
B50	Row Crop	Corn	88	7/17/2024	Tilled. Planted to corn in spring.
B51	Row Crop	Corn	105	7/17/2024	Tilled. Planted to corn in spring.
B52	Row Crop	Corn	94	7/17/2024	Tilled. Planted to corn in spring.
B50	Row Crop	Corn	93	7/17/2024	Tilled. Planted to corn in spring.
B54	Row Crop	Corn	92	7/17/2024	Tilled. Planted to corn period 4..
B55	Row Crop	Corn	113	7/17/2024	Tilled. Planted to corn in spring.
B56	Row Crop	Corn	170	7/17/2024	Tilled. Planted to corn in spring.
B57	Row Crop	Corn	165	7/17/2024	Tilled. Planted to corn in spring.
B58	Row Crop	Corn	180	7/17/2024	Tilled. Planted to corn in spring.
B59	Old Field	Timothy Grass	46	6/25/2024	Unmanaged for duration of study.
B60	Row Crop	Corn	168	7/17/2024	Tilled. Planted to corn in spring.
B61	Other - Field Crop	Common oat	110	7/10/2024	Planted to oats before the survey period.
B62	Other - Field Crop	Common oat	85	7/10/2024	Planted to oats before the survey period.

Table 3-2 Vegetation Types at each Survey Point for Chateaugay Wind Repowering Solar Project in 2024

Survey Point	Vegetation Type	Dominant Plant	Average Vegetation Height (cm)[1]	Date Measured	Time of Mowing
B63	Scrub-Shrub	Smooth Brome	90	6/25/2024	Unmanaged for duration of study.
B64	Row Crop	Corn	150	7/17/2024	Tilled. Planted to corn in spring.
B65	Row Crop	Corn	165	7/17/2024	Tilled. Planted to corn in spring.
B66	Row Crop	Corn	175	7/17/2024	Tilled. Planted to corn in spring.
B67	Old Field	Goldenrod Spp.	95	6/26/2024	Unmanaged for duration of study.
B68	Row Crop	Soybean	18	7/10/2024	Row crop. No-till farming.
B69	Row Crop	Corn	121	7/9/2024	Tilled. Planted to corn in spring.
B70	Row Crop	Corn	115	7/10/2024	Tilled. Planted to corn in spring.
B71	Row Crop	Corn	112	7/9/2024	Tilled. Planted to corn in spring.
B72	Row Crop	Corn	72	7/18/2024	Tilled. Planted to corn in spring.
B73	Row Crop	Corn	105	7/17/2024	Tilled. Planted to corn in spring.
B74	Row Crop	Corn	82	7/16/2024	Tilled. Planted to corn in spring.
B75	Row Crop	Corn	165	7/17/2024	Tilled. Planted to corn in spring.
B76	Row Crop	Corn	83	7/17/2024	Tilled. Planted to corn in spring.
B77	Row Crop	Corn	87	7/17/2024	Tilled. Planted to corn in spring.
MB1	Palustrine Scrub Shrub Wetland	Sedges Spp., Water Plantain Spp.	500	6/27/2024	Unmanaged for duration of study.
MB2	Palustrine Scrub Shrub Wetland/Bog	Other Spp.	200	6/27/2024	Unmanaged for duration of study.

Notes: [1]Average of meter stick measurements taken in four cardinal directions around the center point.
Point B39 dropped because of being inappropriate habitat.

Vegetation height was measured using a meter stick and averaged 92 centimeters (cm) overall for all survey points measured. Vegetation height averaged 109 cm for row crop habitat, 70 cm for old field habitat, 53 cm for hayfield habitat, 90 cm for field crop habitat, 86 cm for scrub-shrub habitat, and 47 cm for pasture habitat. Litter depth varied across the site, averaging 1 cm for all survey point locations.

Nearly all (94 percent) survey point locations with hayfield were mowed at some point during the survey period, with the exception of B42 which was left unmanaged. Survey locations with pastures (B1 and B2) were moderately grazed throughout the survey period (see Table 3-2).

Both marsh bird survey points were classified as palustrine scrub shrub wetland (PSS). Sedges spp. and Water Plantain spp. were the dominant plant species at MB1. At both MB1 and MB2, dominant tree species included black spruce (*Picea mariana*), gray birch (*Betula populafolia*), and tamarack spp. (*Larix* spp.) Other genera of plants were noted at these points but did not surpass the total percent cover of dominant species, such as cattails or reeds. These wetlands were left unmanaged throughout the survey periods.

Site characterization data for all points are presented in Appendix B-1 (BBS) and B-2 (MBS).

3.3 ABUNDANCE, SPECIES COMPOSITION, SPECIES DIVERSITY, RELATIVE ABUNDANCE, AND SPECIES FREQUENCY

GRASSLAND BIRD SURVEYS

During the field survey, 1,760 observations of 62 species were recorded within the 100-meter (328-foot) radius point count survey plots. Abundance ranged from one to 401 observations per species, with an overall average of 2.46 observations per survey. The most abundantly observed species were Savannah Sparrow (*Passerculus sandwichensis*) (401 observations; 23 percent of all bird observations); Song Sparrow (*Melospiza melodia*) (275 observations; 16 percent of all bird observations), Bobolink (*Dolichonyx oryzivorus*) (91 observations; 5 percent of all bird observations); and Chestnut-sided Warbler (*Setophaga pensylvanica*) (89 observations; 5 percent of all observations). Together, these four commonly observed species accounted for approximately 49 percent of the total birds detected throughout the survey (see Table 3-3).

The most frequently observed species across all points were Savannah Sparrow (30 percent frequency), Song Sparrow (26 percent), Chestnut-sided Warbler (10 percent frequency), Yellow Warbler (*Setophaga petechia*; 8 percent frequency), and Bobolink (7 percent frequency), (see Table 3-3).

Table 3-3 Survey Result Statistics by Species within 100 meters, for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024

Species	Abundance (Number of Observations)	Birds per Survey	Relative Abundance (%)	Frequency of Occurrence (%)
Canada Goose	71	0.10	4.0	0.7
Mallard	2	0.00	0.1	0.1
Wild Turkey	1	0.00	0.1	0.1
Mourning Dove	5	0.01	0.3	0.6
Killdeer	4	0.01	0.2	0.4
Turkey Vulture	5	0.01	0.3	0.3
[redacted]				
[redacted]				
Yellow-bellied Sapsucker	1	0.00	0.1	0.1
Downy Woodpecker	1	0.00	0.1	0.1
Hairy Woodpecker	1	0.00	0.1	0.1
Northern Flicker	4	0.01	0.2	0.6
American Kestrel	2	0.00	0.1	0.3
Merlin	1	0.00	0.1	0.1
Alder Flycatcher	31	0.04	1.8	2.7
Eastern Phoebe	4	0.01	0.2	0.4
Great Crested Flycatcher	1	0.00	0.1	0.1
Eastern Kingbird	2	0.00	0.1	0.3

Table 3-3 Survey Result Statistics by Species within 100 meters, for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024

Species	Abundance (Number of Observations)	Birds per Survey	Relative Abundance (%)	Frequency of Occurrence (%)
Warbling Vireo	1	0.00	0.1	0.1
Red-eyed Vireo	25	0.03	1.4	3.5
Blue Jay	7	0.01	0.4	0.7
American Crow	59	0.08	3.4	4.1
Common Raven	1	0.00	0.1	0.1
Black-capped Chickadee	25	0.03	1.4	2.0
Tree Swallow	27	0.04	1.5	0.7
Barn Swallow	57	0.08	3.2	2.8
Red-breasted Nuthatch	1	0.00	0.1	0.1
European Starling	55	0.08	3.1	0.7
Gray Catbird	8	0.01	0.5	1.0
Brown Thrasher	7	0.01	0.4	0.8
Eastern Bluebird	3	0.00	0.2	0.3
American Robin	58	0.08	3.3	4.1
Cedar Waxwing	51	0.07	2.9	2.7
American Pipit	3	0.00	0.2	0.1
House Finch	1	0.00	0.1	0.1
Purple Finch	1	0.00	0.1	0.1
Pine Siskin	1	0.00	0.1	0.1
American Goldfinch	66	0.09	3.8	5.6
Chipping Sparrow	4	0.01	0.2	0.6
Field Sparrow	1	0.00	0.1	0.1
Dark-eyed Junco	1	0.00	0.1	0.1
White-throated Sparrow	19	0.03	1.1	2.2
[redacted]				
Savannah Sparrow	401	0.56	22.8	30.0
Song Sparrow	275	0.38	15.6	26.0
Bobolink	91	0.13	5.2	6.6
Eastern Meadowlark	10	0.01	0.6	1.3
Red-winged Blackbird	87	0.12	4.9	3.4
Common Grackle	16	0.02	0.9	1.1
Ovenbird	3	0.00	0.2	0.4
Black-and-white Warbler	4	0.01	0.2	0.6
Nashville Warbler	4	0.01	0.2	0.4
Mourning Warbler	2	0.00	0.1	0.3
Common Yellowthroat	37	0.05	2.1	4.6
Yellow Warbler	73	0.10	4.1	7.7

Table 3-3 Survey Result Statistics by Species within 100 meters, for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024

Species	Abundance (Number of Observations)	Birds per Survey	Relative Abundance (%)	Frequency of Occurrence (%)
Chestnut-sided Warbler	89	0.12	5.1	10.3
Yellow-rumped Warbler	4	0.01	0.2	0.6
Scarlet Tanager	1	0.00	0.1	0.1
Northern Cardinal	2	0.00	0.1	0.1
Rose-breasted Grosbeak	3	0.00	0.2	0.4
Indigo Bunting	34	0.05	1.9	4.3
Grand Total	**1,760**	**2.46**	**100.0**	--

Notes: Point B39 was omitted from analyses.

MARSH BIRD SURVEYS

During the field survey at the two marsh bird survey points, 32 observations of 11 species were recorded (includes detections at all distances). There were no detections of focal marsh bird species.

Abundance ranged from one to 11 observations per species, with an overall average of 5.0 observations per 11-minute survey. The most abundantly observed species were White-throated Sparrow (*Zonotrichia albicollis*) (11 observations; 34 percent of all bird observations) and Common Yellowthroat (*Geothlypis trichas*) (5 observations; 16 percent of all bird observations). Together, these two commonly observed species accounted for approximately 50 percent of the total birds detected throughout the marsh bird survey (see Table 3-4).

The most frequently observed species for the marsh bird surveys were White-throated Sparrow (67 percent frequency), and Common Yellowthroat (50 percent frequency) (see Table 3-4).

Table 3-4 Survey Result Statistics by Species for the Breeding Marsh Bird Survey at Chateaugay Wind Repowering Project from May to June 2024 (all Distances)

Species	Abundance (Number of Birds Observed)	Observations per Survey	Relative Abundance (%)	Frequency of Occurrence (%)
Alder Flycatcher	3	0.50	9.4	33.3
Blue Jay	1	0.17	3.1	16.7
American Crow	2	0.33	6.3	33.3
Common Raven	1	0.17	3.1	16.7
Gray Catbird	1	0.17	3.1	16.7
Hermit Thrush	2	0.33	6.3	33.3
White-throated Sparrow	11	1.83	34.4	66.7
Song Sparrow	3	0.50	9.4	33.3
Common Grackle	1	0.17	3.1	16.7
Common Yellowthroat	5	0.83	15.6	50.0
Chestnut-sided Warbler	2	0.33	6.3	16.7
Grand Total	**32**	**5**	**100.0**	--

Notes: Marsh bird data analyses include birds observed at all distances.

3.4 ABUNDANCE AND SPECIES DIVERSITY BY SURVEY LOCATION

GRASSLAND BIRD SURVEYS

Total species diversity for the 76 survey points ranged from one species (points B16 [field crop], B48 and B53 [both row crop]) to 22 species (point B30 [row crop]) with an average of 6.9 species across all points (see Table 3-4). The greatest number of observations per survey by point occurred at points B1 (pasture) and B67 (old field), which averaged 12.0 and 9.2 observations per survey, respectively (see Table 3-4). The lowest average number of observations per survey occurred at point B48 (row crop), which averaged 0.01 observations per survey (see Table 3-5).

Appendix C provides the abundance of each species by survey location and abundance of each species by survey period.

Table 3-5 Survey Results by Point for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024 (within 100 meters)

Point	Habitat Type	Abundance (Number of Birds Detected)	Number of Surveys	Number of Birds Detected per Survey	Relative Abundance (%)	Species Diversity (Total Number of Species by Point)
B1	Pasture	96	8	12.0	5.5	11
B2	Pasture	34	8	4.3	1.9	12
B3	Hayfield	34	8	4.3	1.9	9
B4	Hayfield	9	8	1.1	0.5	2
B5	Hayfield	15	10	1.5	0.9	9
B6	Hayfield	26	10	2.6	1.5	3
B7	Hayfield	31	10	3.1	1.8	5
B8	Hayfield	30	10	3.0	1.7	3
B9	Hayfield	31	10	3.1	1.8	5
B10	Hayfield	27	10	2.7	1.5	7
B11	Hayfield	33	10	3.3	1.9	5
B12	Row Crop	16	10	1.6	0.9	8
B13	Other - Field Crop	26	10	2.6	1.5	4
B14	Other - Field Crop	22	10	2.2	1.3	3
B15	Row Crop	20	9	2.2	1.1	5
B16	Other - Field Crop	9	10	0.9	0.5	1
B17	Row Crop	31	10	3.1	1.8	4
B18	Hayfield	24	10	2.4	1.4	3
B19	Hayfield	20	10	2.0	1.1	5
B20	Hayfield	8	10	0.8	0.5	3
B21	Hayfield	19	10	1.9	1.1	4
B22	Row Crop	19	10	1.9	1.1	7

Table 3-5 Survey Results by Point for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024 (within 100 meters)

Point	Habitat Type	Abundance (Number of Birds Detected)	Number of Surveys	Number of Birds Detected per Survey	Relative Abundance (%)	Species Diversity (Total Number of Species by Point)
B23	Row Crop	15	10	1.5	0.9	6
B24	Row Crop	35	10	3.5	2.0	10
B25	Row Crop	9	8	1.1	0.5	7
B26	Row Crop	10	8	1.3	0.6	6
B27	Row Crop	3	8	0.4	0.2	2
B28	Row Crop	10	8	1.3	0.6	7
B29	Row Crop	6	8	0.8	0.3	4
B30	Row Crop	53	10	5.3	3.0	22
B31	Row Crop	29	10	2.9	1.6	9
B32	Row Crop	23	10	2.3	1.3	9
B33	Row Crop	9	10	0.9	0.5	4
B34	Row Crop	28	10	2.8	1.6	10
B35	Row Crop	32	10	3.2	1.8	10
B36	Row Crop	7	10	0.7	0.4	3
B37	Row Crop	25	10	2.5	1.4	10
B38	Row Crop	3	8	0.4	0.2	3
B40	Scrub-Shrub	34	10	3.4	1.9	11
B41	Row Crop	46	10	4.6	2.6	15
B42	Hayfield	18	10	1.8	1.0	8
B43	Hayfield	57	10	5.7	3.2	13
B44	Hayfield	57	10	5.7	3.2	11
B45	Hayfield	36	10	3.6	2.0	7
B46	Hayfield	46	10	4.6	2.6	9
B47	Row Crop	16	10	1.6	0.9	6
B48	Row Crop	1	10	0.1	0.1	1
B49	Row Crop	7	10	0.7	0.4	6
B50	Row Crop	26	10	2.6	1.5	13
B51	Row Crop	39	10	3.9	2.2	19
B52	Row Crop	12	10	1.2	0.7	8
B53	Row Crop	14	10	1.4	0.8	1
B54	Row Crop	64	10	6.4	3.6	9
B55	Row Crop	4	10	0.4	0.2	3
B56	Row Crop	5	8	0.6	0.3	2
B57	Row Crop	3	8	0.4	0.2	3
B58	Row Crop	5	10	0.5	0.3	3
B59	Old Field	43	8	5.4	2.4	14

Table 3-5 Survey Results by Point for the Grassland Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024 (within 100 meters)

Point	Habitat Type	Abundance (Number of Birds Detected)	Number of Surveys	Number of Birds Detected per Survey	Relative Abundance (%)	Species Diversity (Total Number of Species by Point)
B60	Row Crop	13	8	1.6	0.7	7
B61	Other - Field Crop	3	10	0.3	0.2	2
B62	Other - Field Crop	18	10	1.8	1.0	4
B63	Scrub-Shrub	51	10	5.1	2.9	12
B64	Row Crop	8	8	1.0	0.5	6
B65	Row Crop	5	8	0.6	0.3	3
B66	Row Crop	15	8	1.9	0.9	7
B67	Old Field	92	10	9.2	5.2	14
B68	Row Crop	12	10	1.2	0.7	5
B69	Row Crop	13	9	1.4	0.7	7
B70	Row Crop	4	7	0.6	0.2	2
B71	Row Crop	24	7	3.4	1.4	10
B72	Row Crop	4	10	0.4	0.2	3
B73	Row Crop	13	10	1.3	0.7	8
B74	Row Crop	15	10	1.5	0.9	6
B75	Row Crop	10	8	1.3	0.6	8
B76	Row Crop	34	10	3.4	1.9	10
B77	Row Crop	16	10	1.6	0.9	10
	Total	**1,760**	**716**	**--**	**100.0**	**62**
	Average	**23.2**	**9.4**	**2.4**	**--**	**6.9**

Notes: Point B39 was omitted from analyses.

MARSH BIRD SURVEYS

Species diversity from all distances from the marsh bird survey points was eight species at both points MB1 (PSS) and MB2 (PSS/Bog), with a total of 11 species detected across the two points (see Table 3-6).

Table 3-6 Survey Results by Point for the Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024 (all Distances)

Point	Habitat Type	Abundance (Number of Birds Detected)	Number of Surveys	Number of Birds Detected per Survey	Relative Abundance (%)	Species Diversity (Total Number of Species by Point)
MB1	PSS	15	3	5.0	46.9	8
MB2	PSS/Bog	17	3	5.7	53.1	8

Table 3-6 Survey Results by Point for the Breeding Bird Survey at the Chateaugay Wind Repowering Project from May to July 2024 (all Distances)

Point	Habitat Type	Abundance (Number of Birds Detected)	Number of Surveys	Number of Birds Detected per Survey	Relative Abundance (%)	Species Diversity (Total Number of Species by Point)
	Total	**32**	**6**	**–**	**100.0**	**11**
	Average	**16.0**	**3**	**5.3**	**–**	**8.0**

3.5 INCIDENTAL OBSERVATIONS

An additional 6,863 observations of 91 species were recorded outside of the 100-meter (328-foot) radius point count plots. An additional 106 observations of 19 species were recorded outside the 5-minute timeframe of surveys. Three state-listed threatened species were detected outside of the 100-meter point count survey radius or outside the timeframe of surveys: [redacted] Observations of state-listed species are described in Section 3.7. Data for all incidental observations are included in Appendix D.

No incidental observations were recorded for marsh bird surveys.

3.6 SPECIES CONFIRMED AS LOCAL BREEDERS

Breeding was confirmed at the Study Area (or near vicinity) for ten bird species, including incidental observations. The most notable confirmed breeding was [redacted] which was observed carrying food. European Starling (*Sturnus vulgaris*) was the most frequently observed species exhibiting behaviors sufficient to confirm nesting, including adults carrying food or nesting material, and the presence of recently fledged young. The other eight species confirmed as local breeders included Northern Flicker (*Colaptes auratus*), American Crow (*Corvus brachyrhynchos*), Barn Swallow (*Hirundo rustica*), American Robin (*Turdus americanus*), Savannah Sparrow, Song Sparrow, Red-winged Blackbird (*Agelaius phoeniceus*), and Common Grackle (*Quiscalus quiscula*).

No species were confirmed as local breeders during marsh bird surveys. See Appendix A for a complete list of species, numbers, and behavior of individuals observed.

3.7 SPECIES OF CONCERN

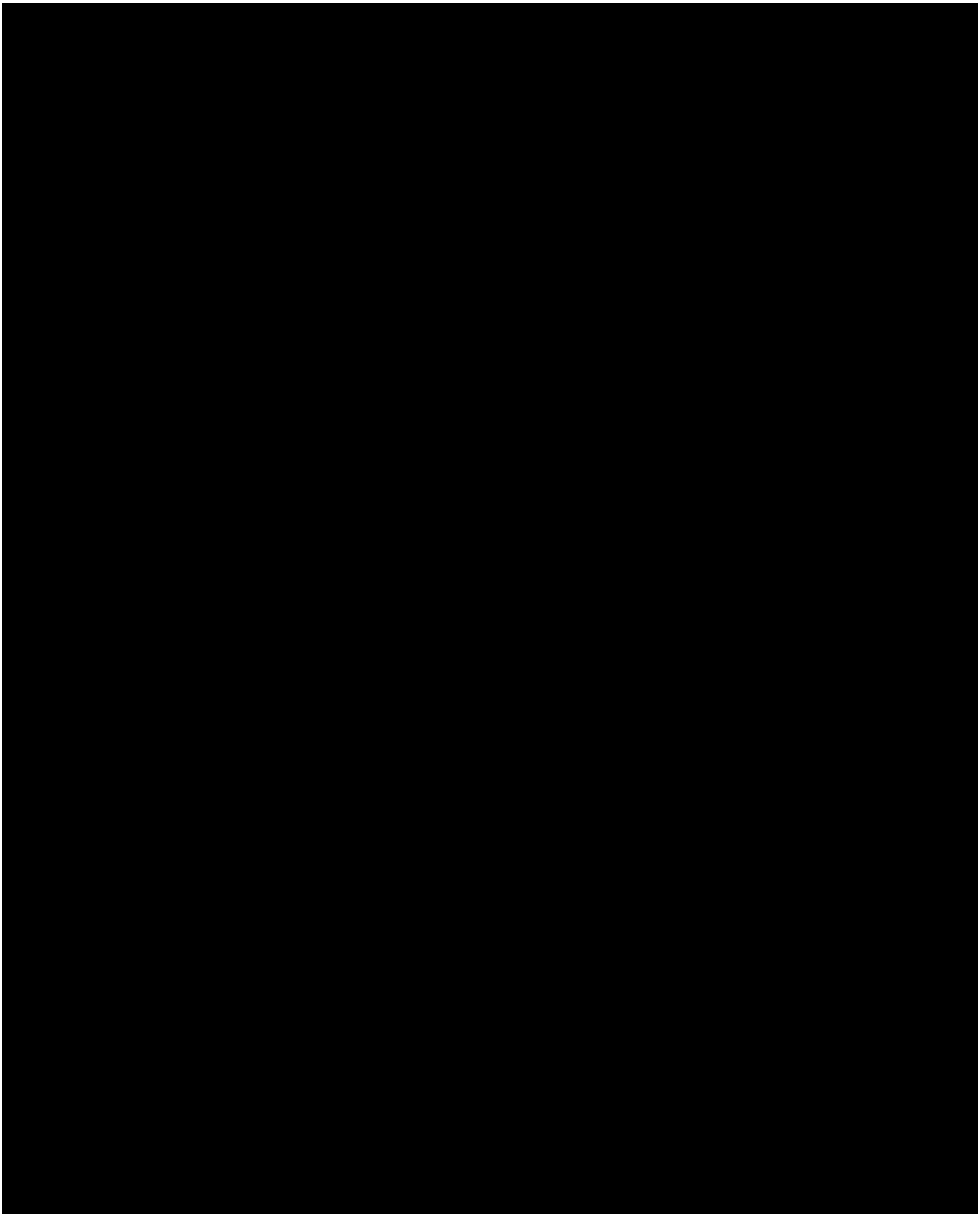
No state-listed endangered species were identified during the breeding bird surveys. Three state-listed threatened species were identified within the Study Area during the grassland breeding bird surveys: [redacted] There were nine [redacted] sightings observed during the survey period (see Table 3-7 and Figure 3-1). [redacted] sighting was within the 100-meter radius circular plots during the surveys and five [redacted] sightings were beyond the 100-m radius plot. Three [redacted] sightings were incidental observations outside the surveying timeframe. Most notably, [redacted]

[redacted] were observed landing in a hayfield together near and foraging thereafter near [redacted] on June 20, 2024. There were also sightings of [redacted] in foraging flight near survey point locations [redacted]. The highest breeding code observed for [redacted] was a pair in suitable habitat, which is probable breeding according to the New York Breeding Bird Atlas (NYSDEC 2024). [redacted] was documented outside of the 100-m radius circular plot of [redacted] during surveying. The highest breeding code observed for [redacted] was a singing bird, which is possible breeding according to the New York Breeding Bird Atlas. In addition, there were [redacted] sightings. Two of the [redacted] sightings were within the 100-m radius circular plots, with one being an incidental sighting outside of the survey timeframe. [redacted] sighting was seen outside of the 100-m radius circular plots during surveys. The highest breeding code observed for [redacted] was in appropriate habitat, which is possible breeding according to the New York Breeding Bird Atlas.

Fourteen sightings of New York State species of special concern were identified during breeding bird surveys. [redacted] sightings were observed within the 100-meter (m) radius circular plots during the surveys and [redacted] sightings were beyond the 100-m radius plot during the surveys. [redacted] were incidentals that were recorded outside survey timeframe. On June 20, 2024, [redacted] were observed carrying food into an [redacted]. Carrying food is considered confirmed evidence of nesting birds according to the New York Breeding Bird Atlas (NYSDEC 2024). [redacted] were detected beyond the 100-meter radius of [redacted]. The highest breeding code observed for [redacted] was a singing bird, which is possible breeding according to the New York Breeding Bird Atlas. One incidental [redacted] was observed in direct flight traveling southwest with a breeding code of in appropriate habitat. Details on the species of special concern sightings are provided in Table 3-7 and locations are indicated in Figure 3-1.

Appendix E includes representative photographs of the habitat at survey points where the state-listed threatened species and species of special concern were observed during breeding bird surveys. No New York State-listed threatened, endangered or species of special concern were observed during marsh bird surveys.

[redacted]



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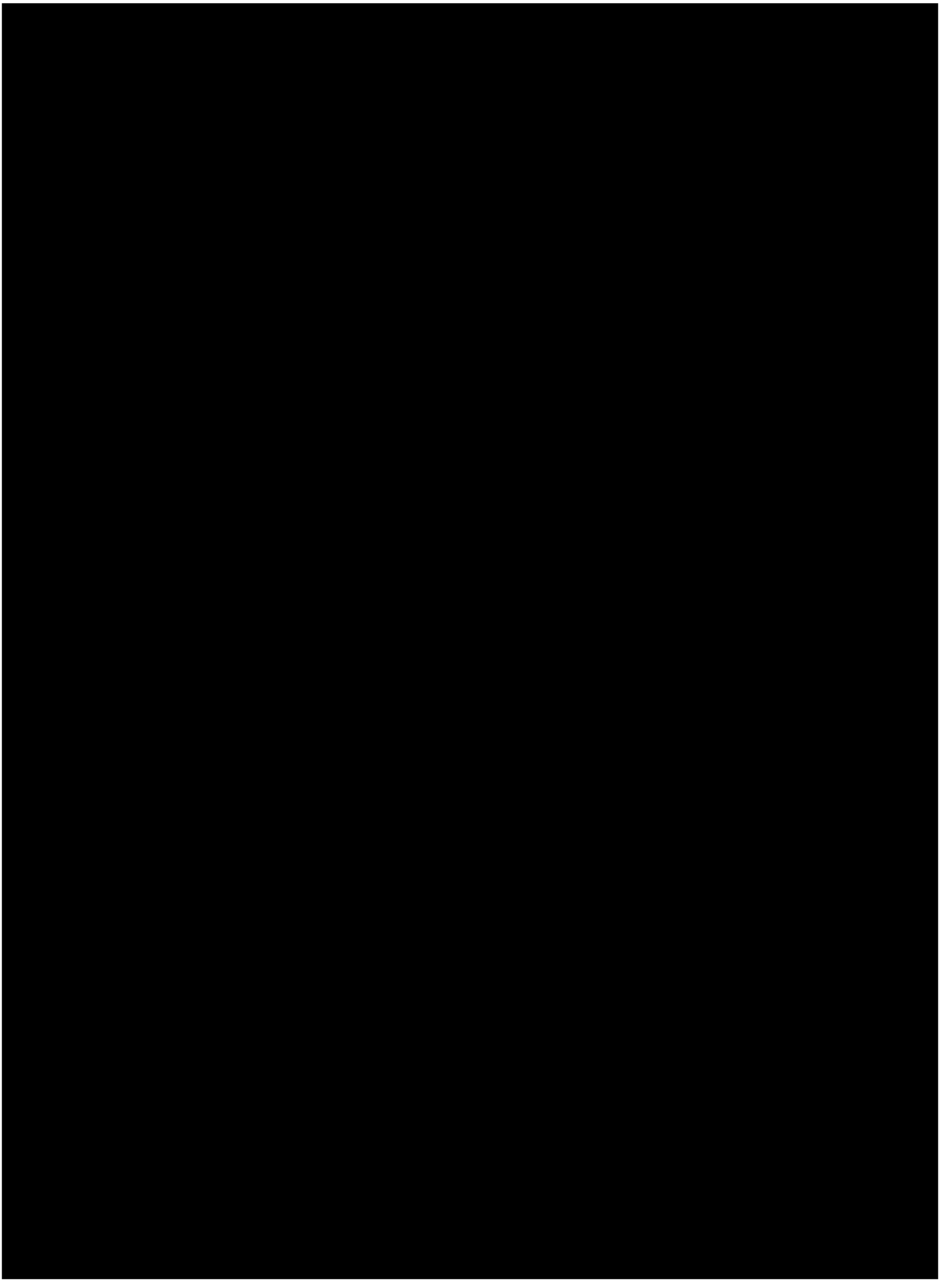

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3.8 WEATHER CONDITIONS AND DISTURBANCES

Weather conditions were conducive to surveying. In general, temperatures slowly rose throughout each survey day, and winds tended to increase throughout each day and varied in direction. On six occasions during surveys, wind speed marginally exceeded 12 miles per hour, but did not noticeably affect bird activity. Precipitation was also noted during six survey days as less than light rain and intermittent. Weather conditions during the breeding bird and marsh bird survey period and days prior to surveys are noted in Appendix F.

Disturbance events were rare but may have affected some surveys. The surveyor resolved potential disruptions by waiting for the disturbance or weather event to pass or returning to the survey point at a later time. Inclement weather was not a factor.

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4 SUMMARY

During the grassland bird field surveys, [redacted]. There were nine observations of [redacted]. One observation was made within the 100-meter point count plots near [redacted]. Outside the 100-meter radius, a total of five [redacted] sightings were observed throughout the Study Area. An additional three [redacted] sightings were incidental observations outside the surveying timeframe. On June 20, 2024, [redacted] were incidentally observed landing in a hayfield together near [redacted]

No New York State listed threatened, endangered or species of special concern were observed during marsh bird surveys. No focal marsh bird species were detected during marsh bird surveys.

[redacted]

WSP implemented the NYSDEC Survey Protocol for State-Listed Breeding Grassland Bird Species. WSP diligently followed the survey schedule to meet the protocol, including conducting eight to 10 survey periods (as many as four in May, four in June, and two in July) for all grassland point count plots. There were 76 grassland survey points surveyed between May 1, 2024, and July 19, 2024, which provided thorough coverage of the Study Area throughout the 2024 breeding season.

For marsh bird surveys, WSP implemented the protocol in the Standardized North American Marsh Bird Monitoring Protocols (Conway 2011). WSP conducted three surveys (one survey period in May and two in June) to determine the presence or absence of the state-listed threatened or endangered marsh birds. The three surveys at two points between May 31 and June 27, 2024, provided adequate coverage of wetland habitats where project components may potentially approach areas suitable for marsh birds.

The results of the survey efforts suggest that more comprehensive studies are not necessary to adequately assess the potential for the Project to affect endangered or threatened grassland nesting bird species and breeding marsh bird species.

5 REFERENCES

[redacted]

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[redacted]

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WSP USA, Inc. (WSP). 2024b. *Marsh Bird Survey Bird Survey Study Plan for the Proposed Chateaugay Wind Repowering Project, Town of Chateaugay, Franklin County, New York.* April 2024.

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APPENDIX

A Full Survey Results

Note: The full breeding bird survey dataset uses the data form provided by NYSDEC as part of the 2022 breeding bird survey protocol. The "Number Observed" field for records with "Stationary" entered for Protocol includes all birds recorded during the five-minute surveys. For a given species during a survey this number includes birds within the 100-meter survey radius, outside the 100-meter survey radius, and flyover detections. Records with "Incidental" for Protocol represent birds recorded between survey points.

It is noted that entering reportable data into the New York State Breeding Bird Atlas via eBird is an optional data management tool. However, Chateaugay NewCo prefers to not enter data into eBird at this time.

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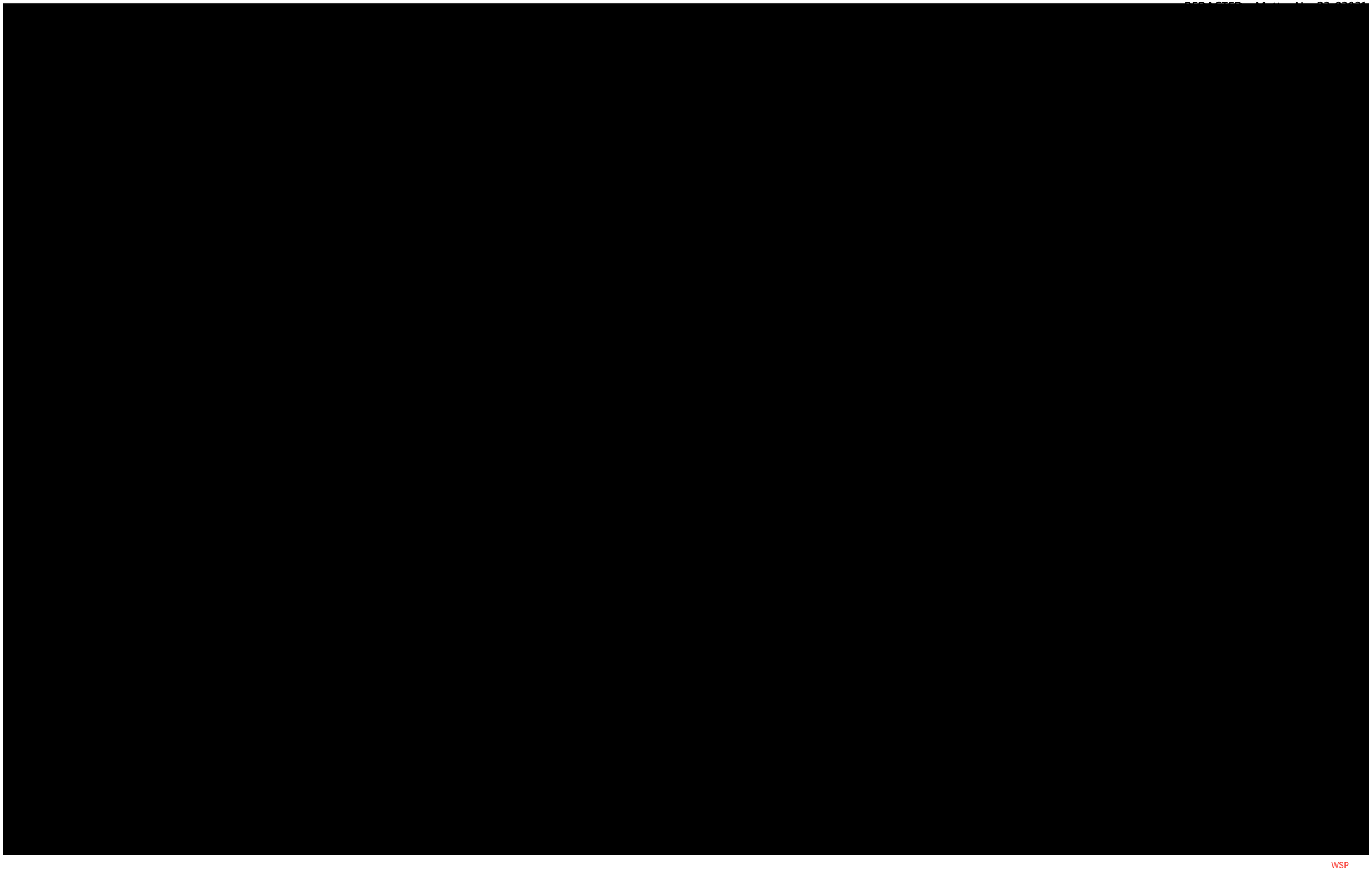

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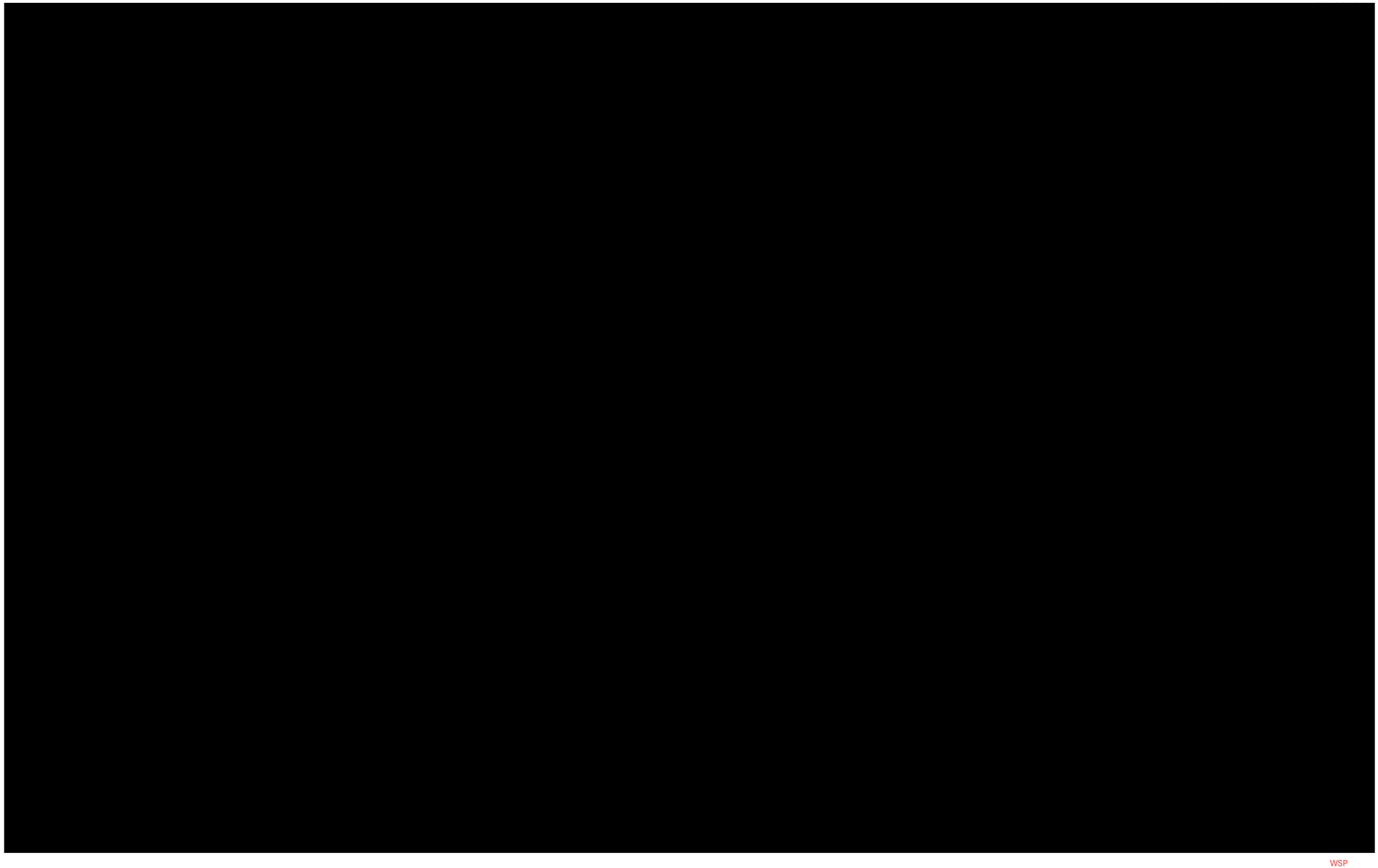

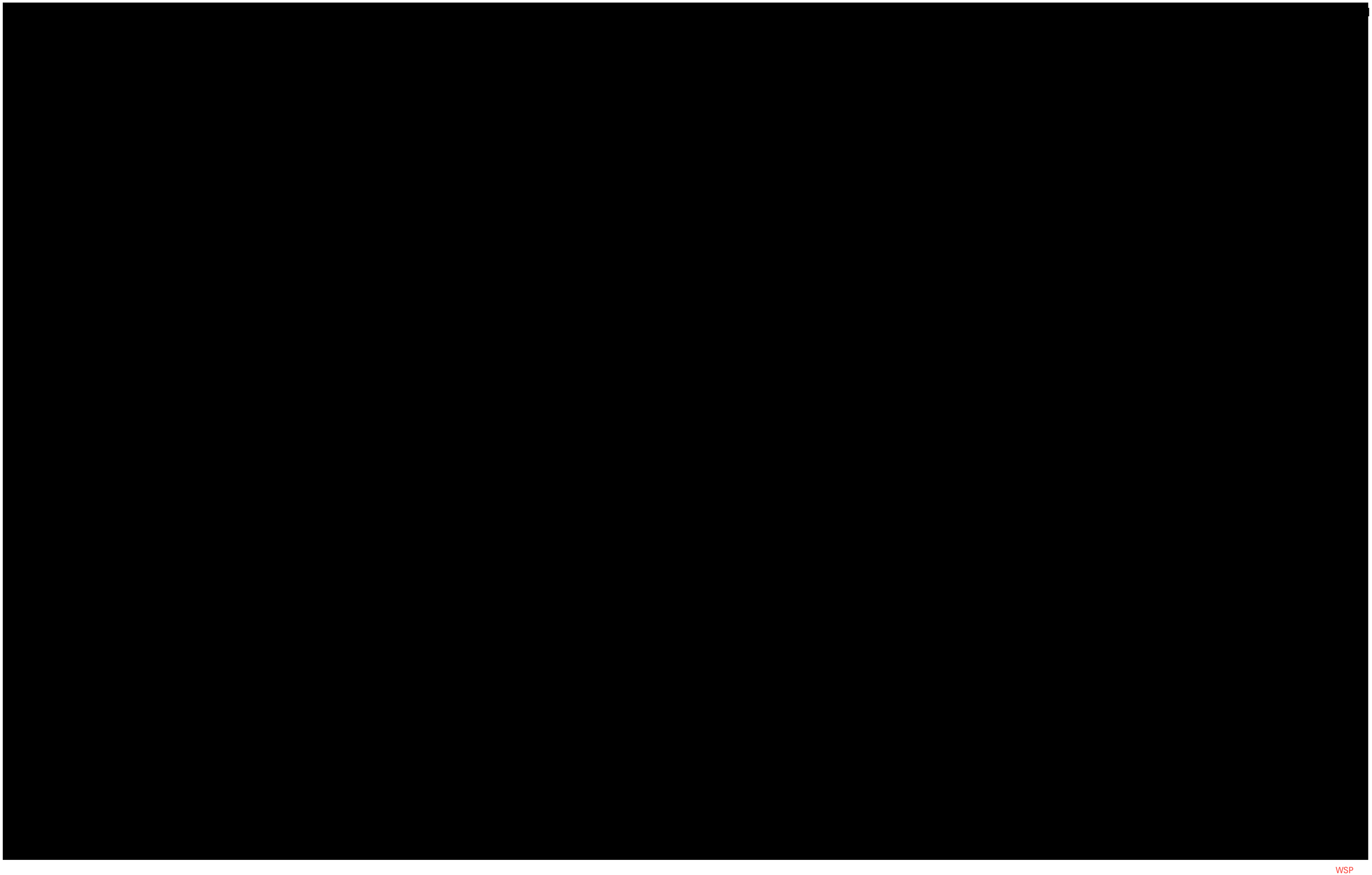

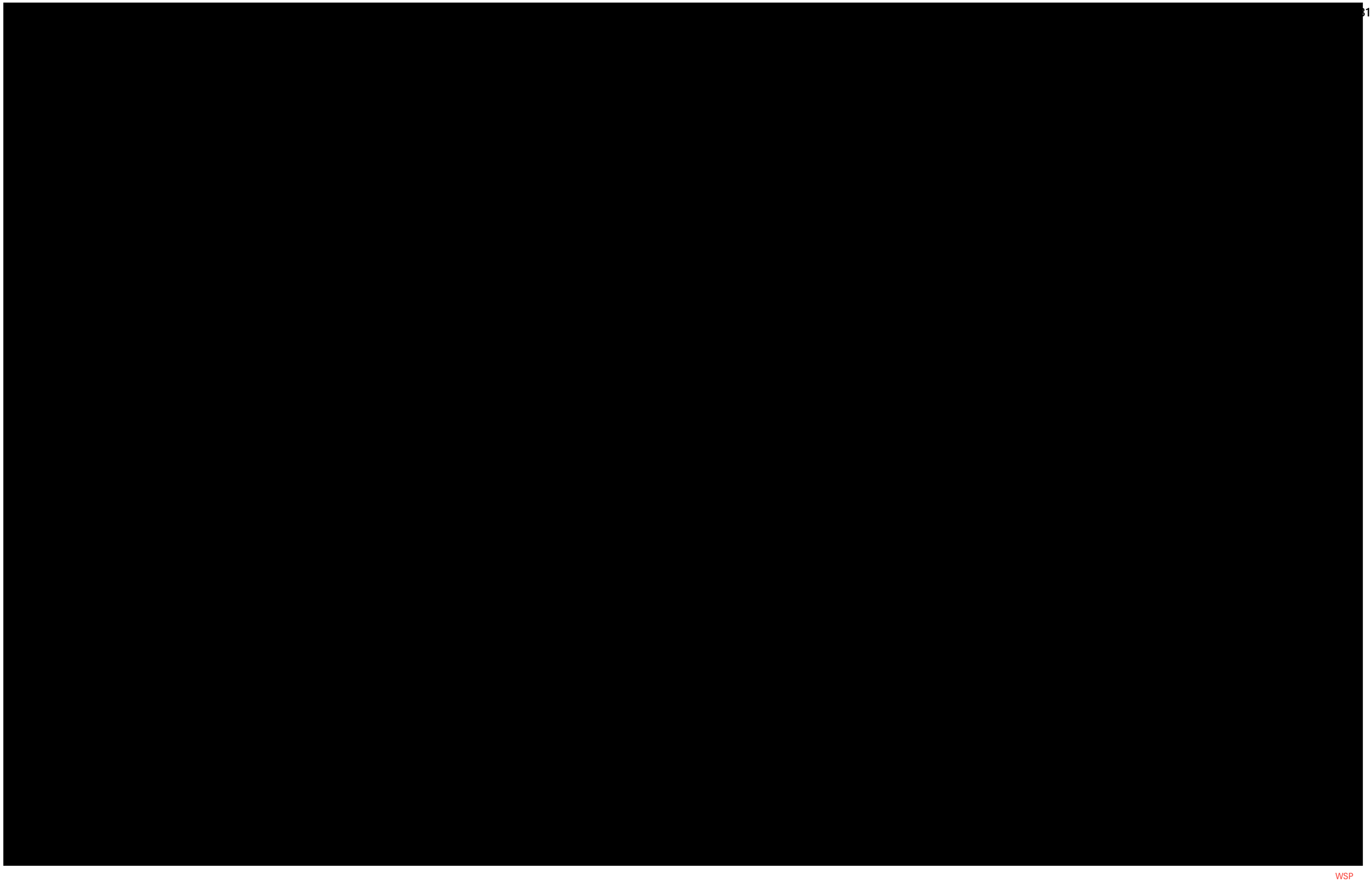

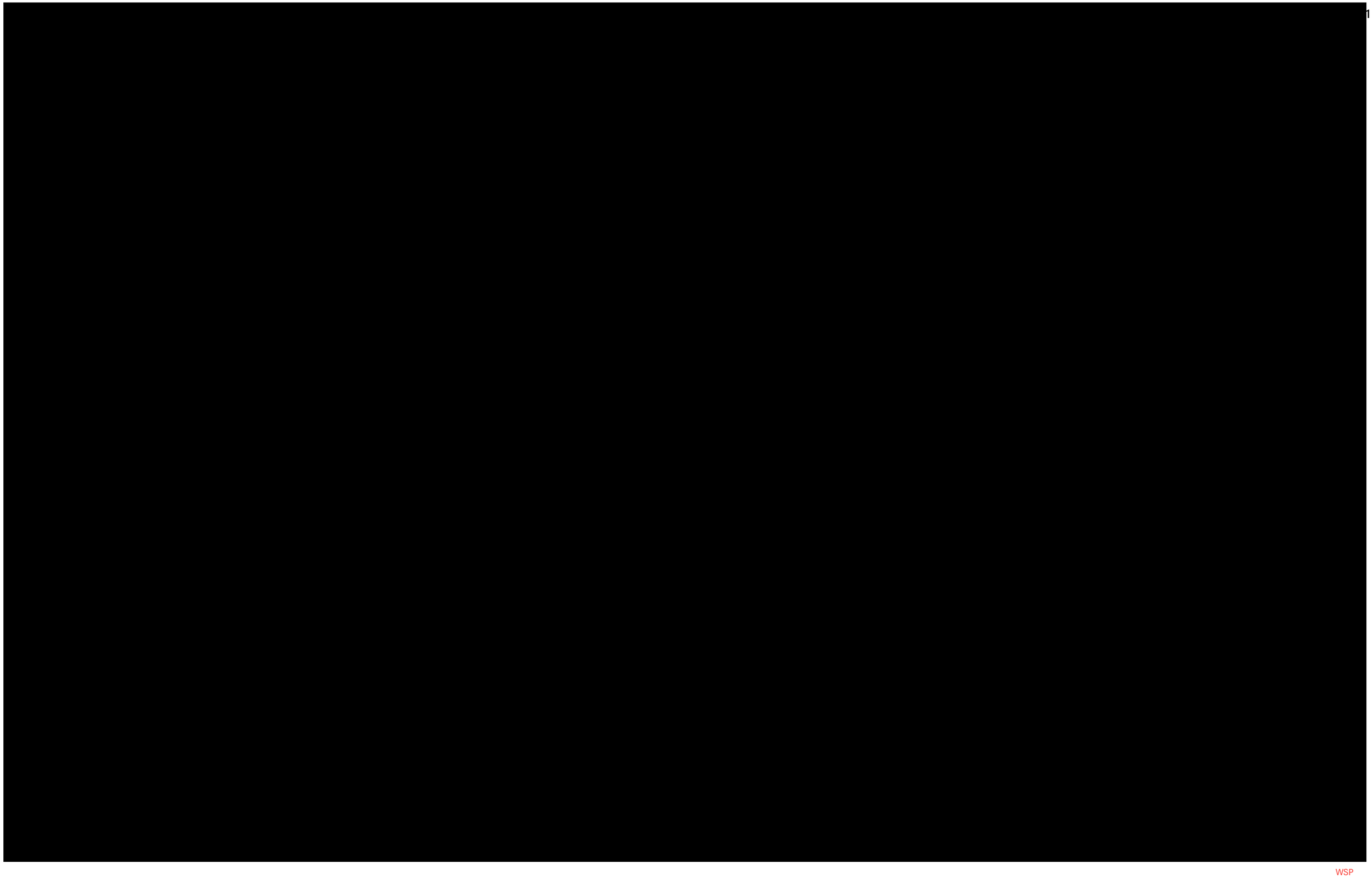

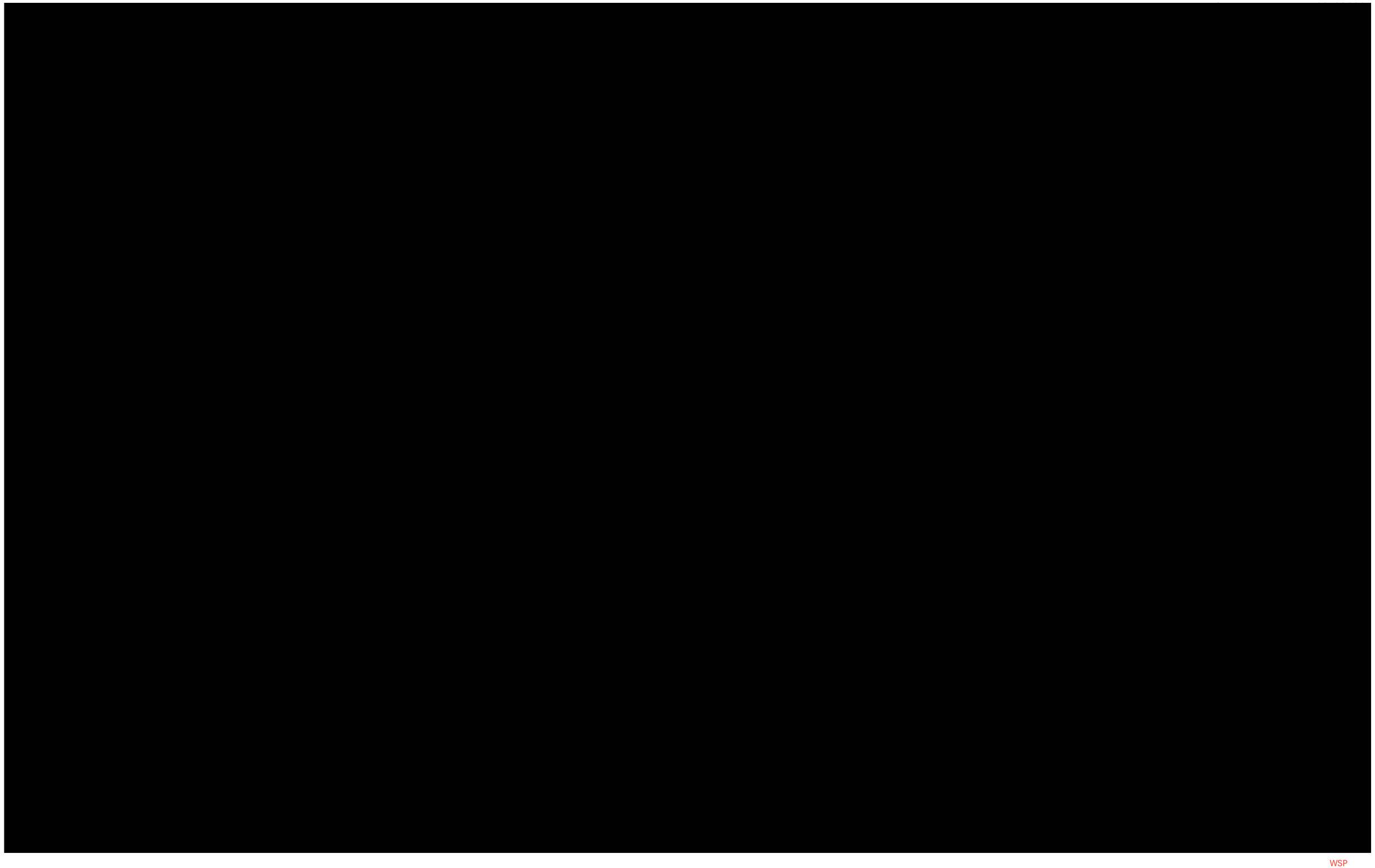

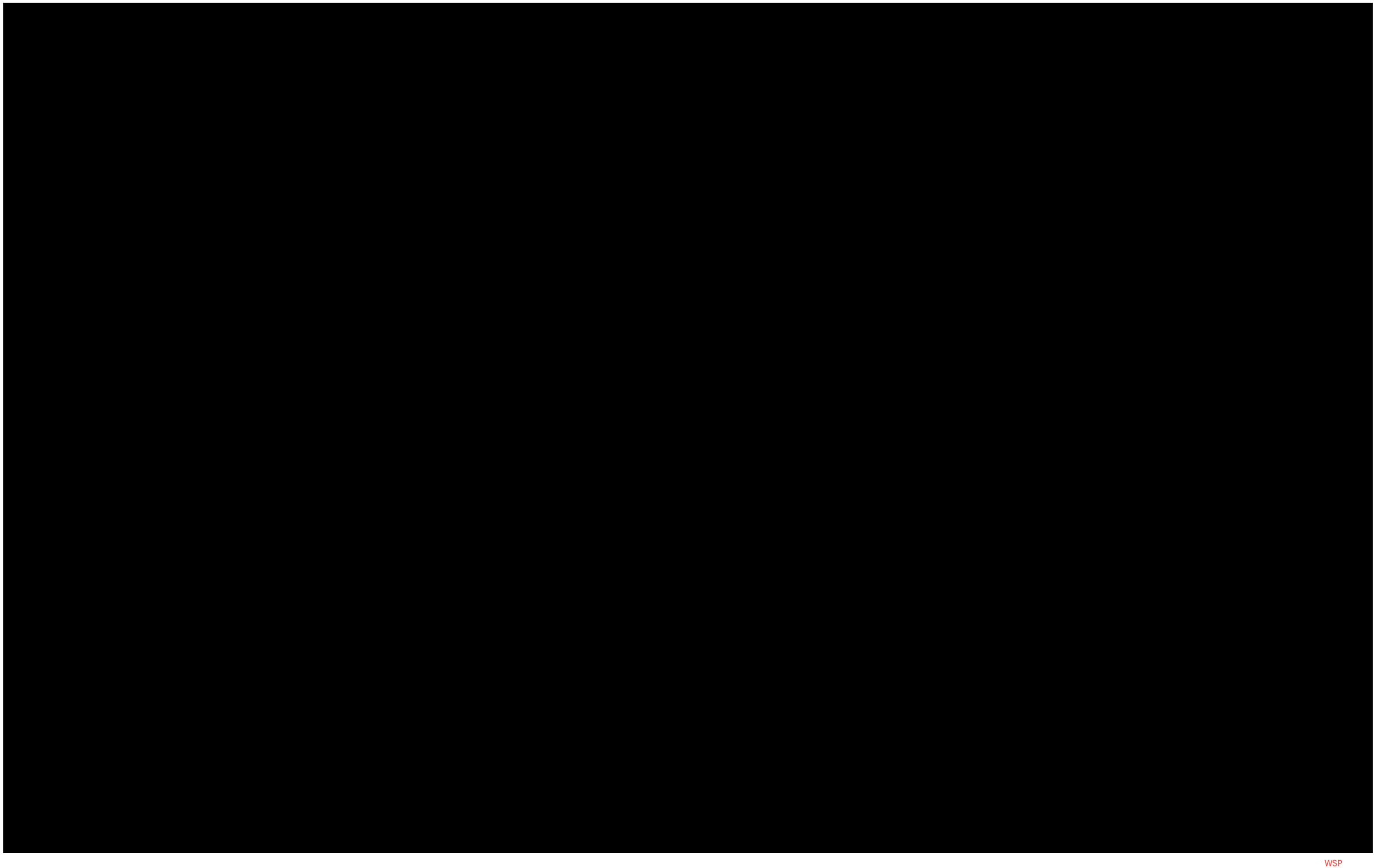

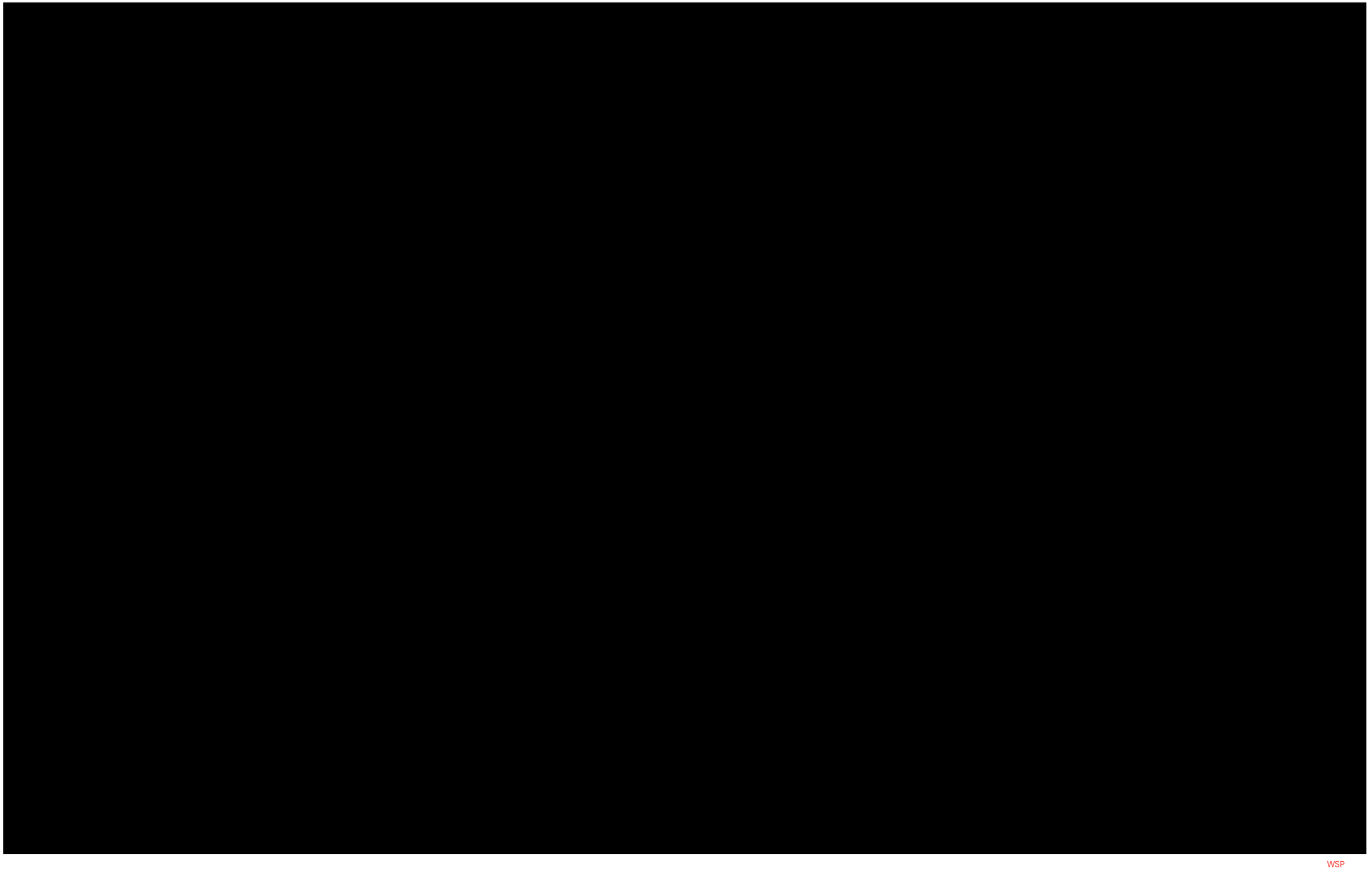

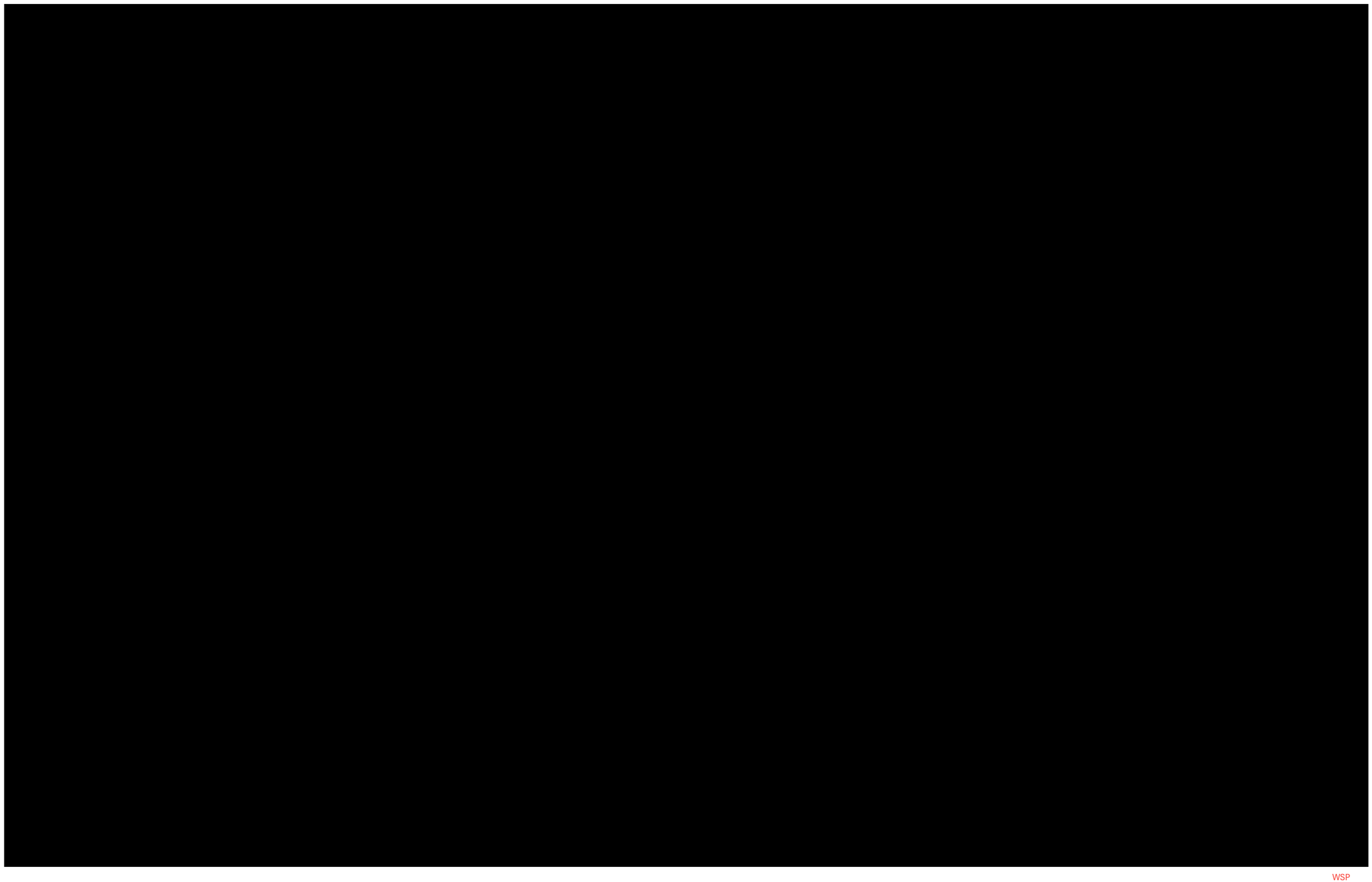

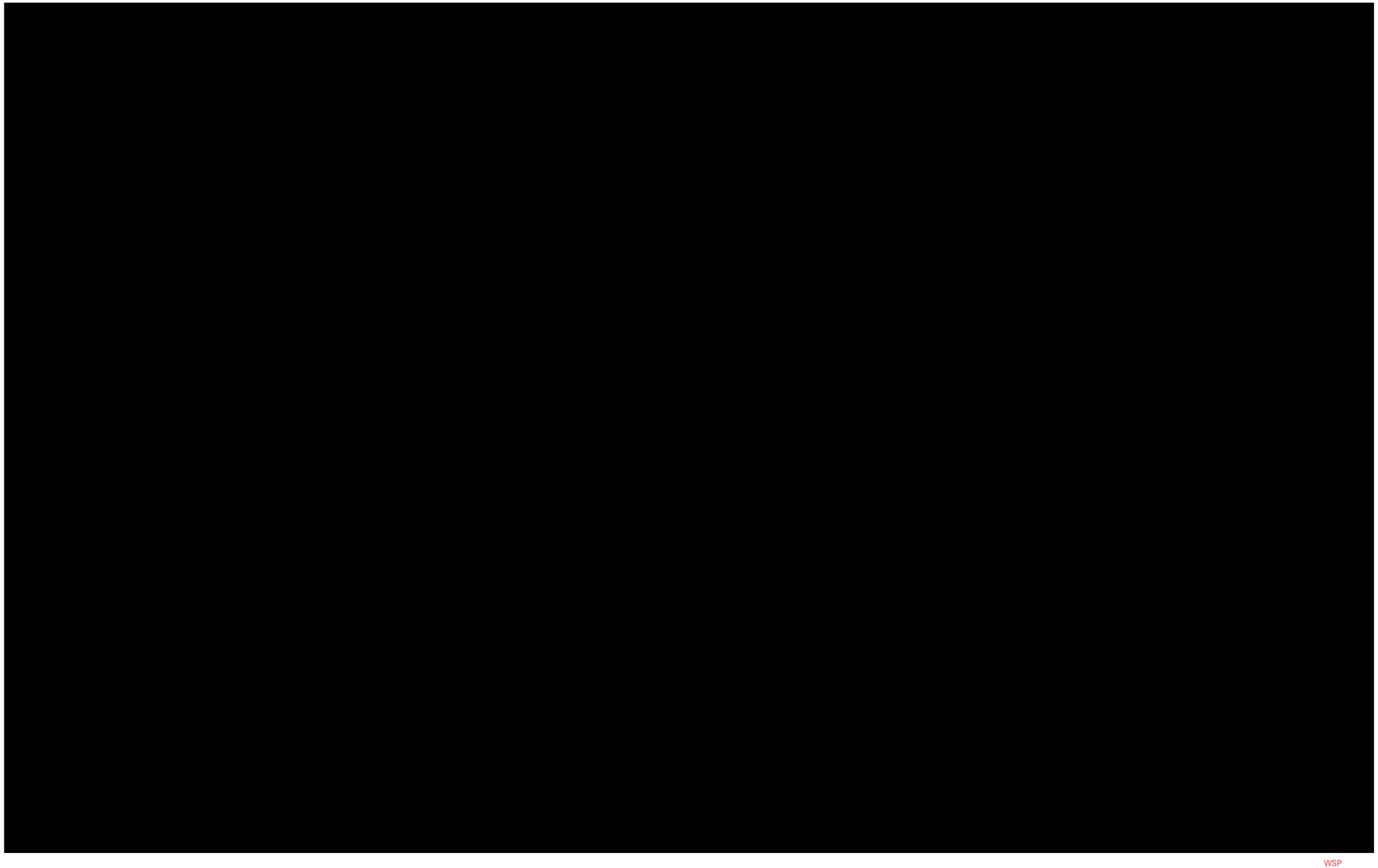

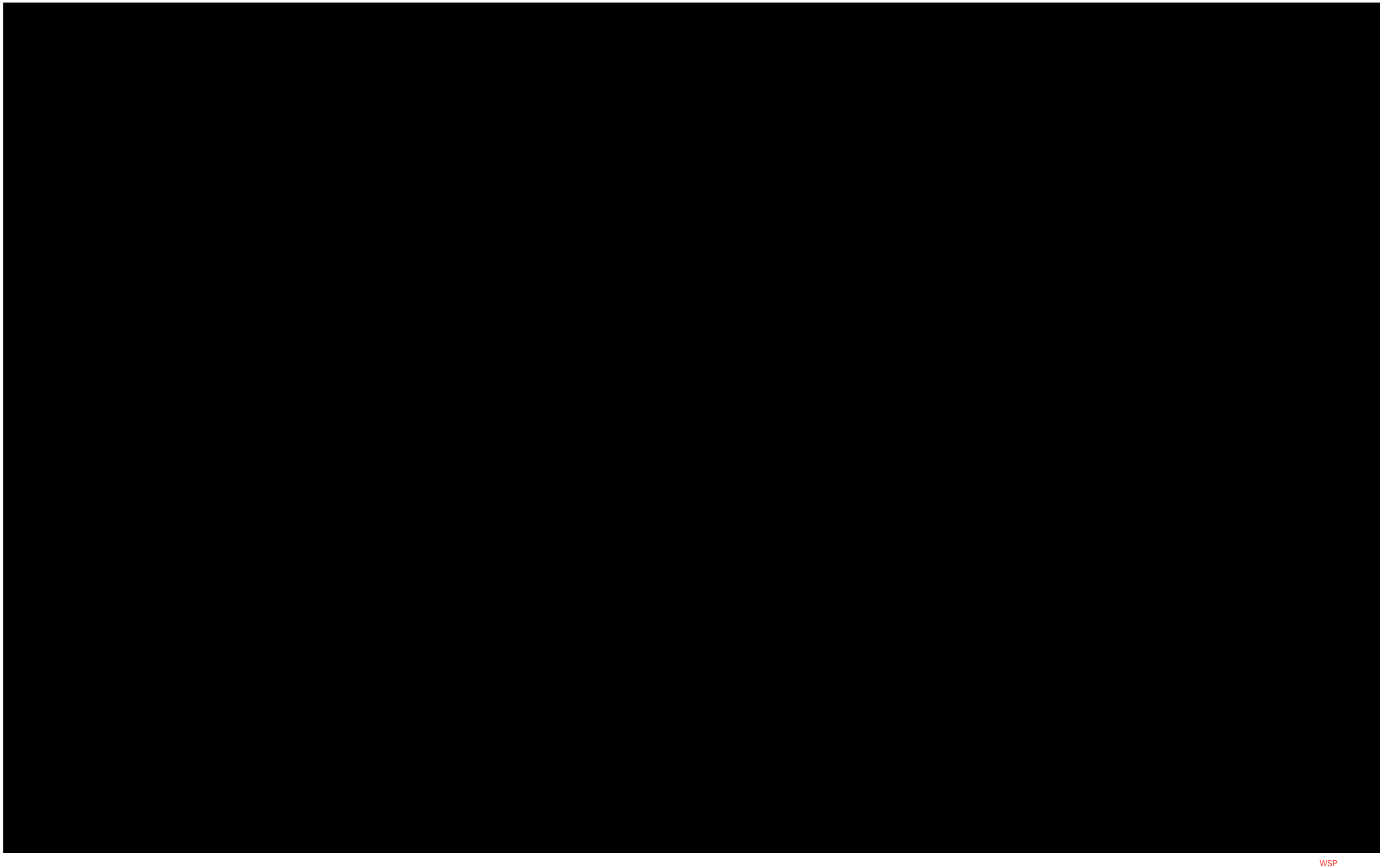

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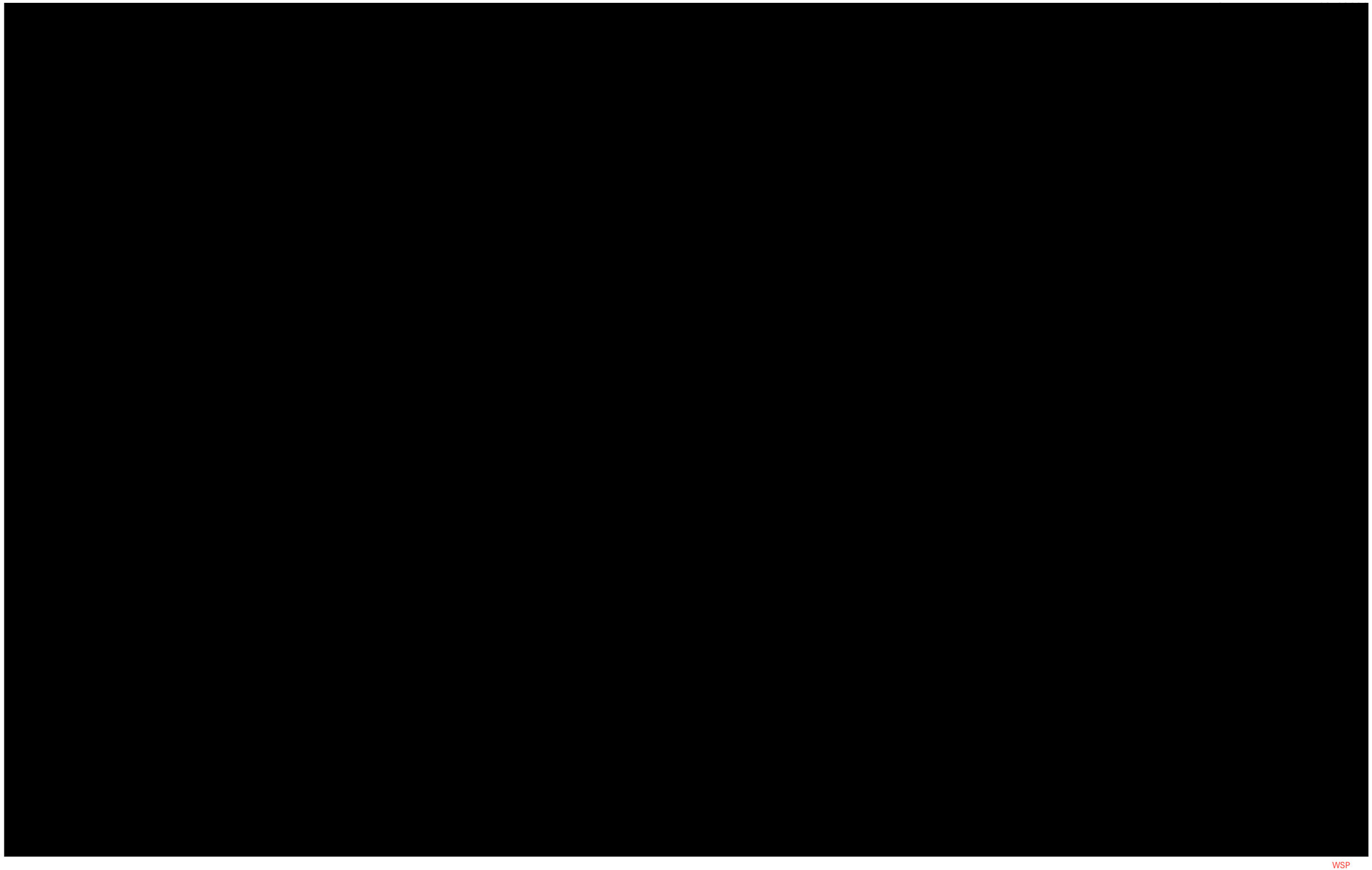

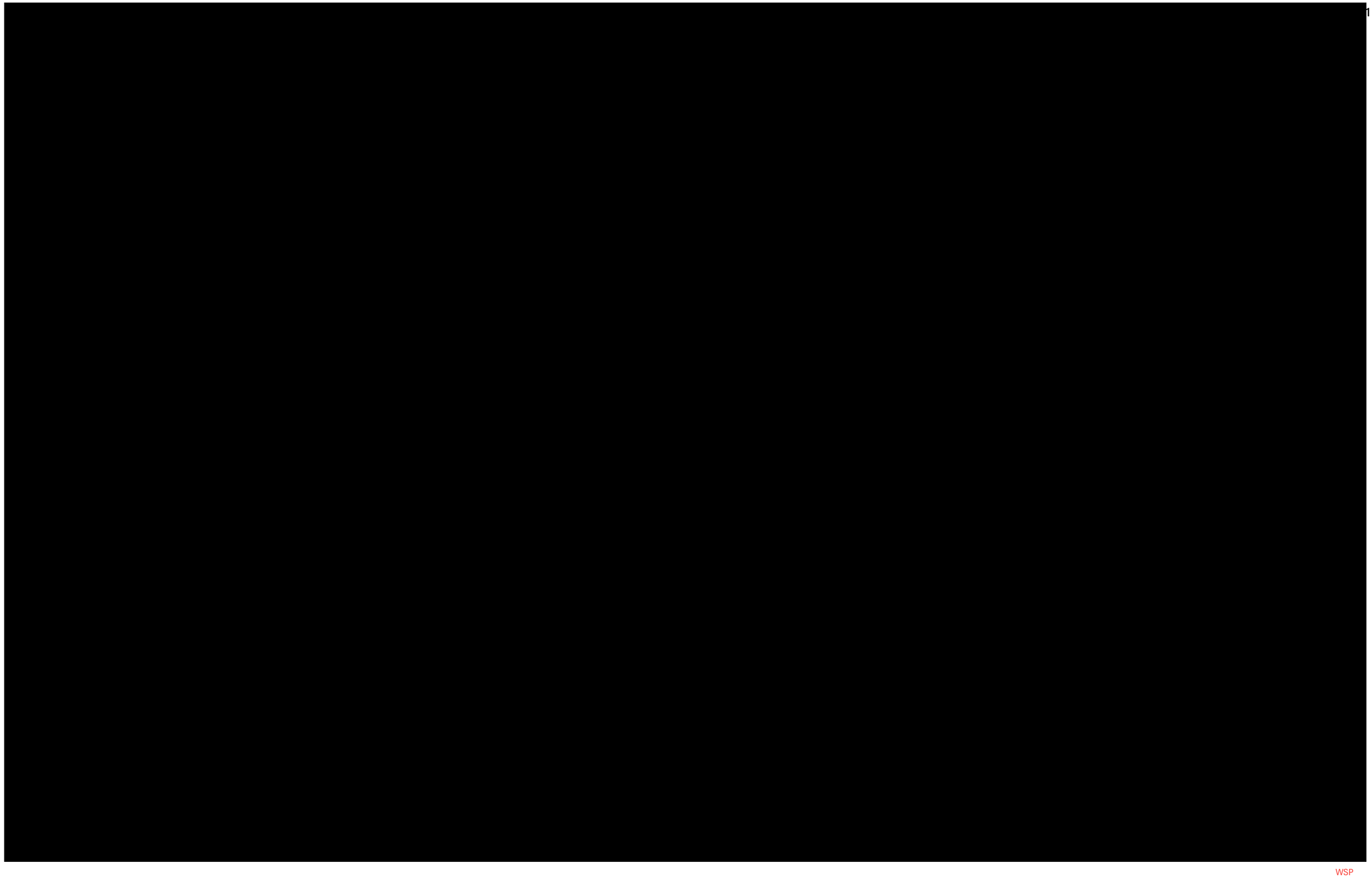

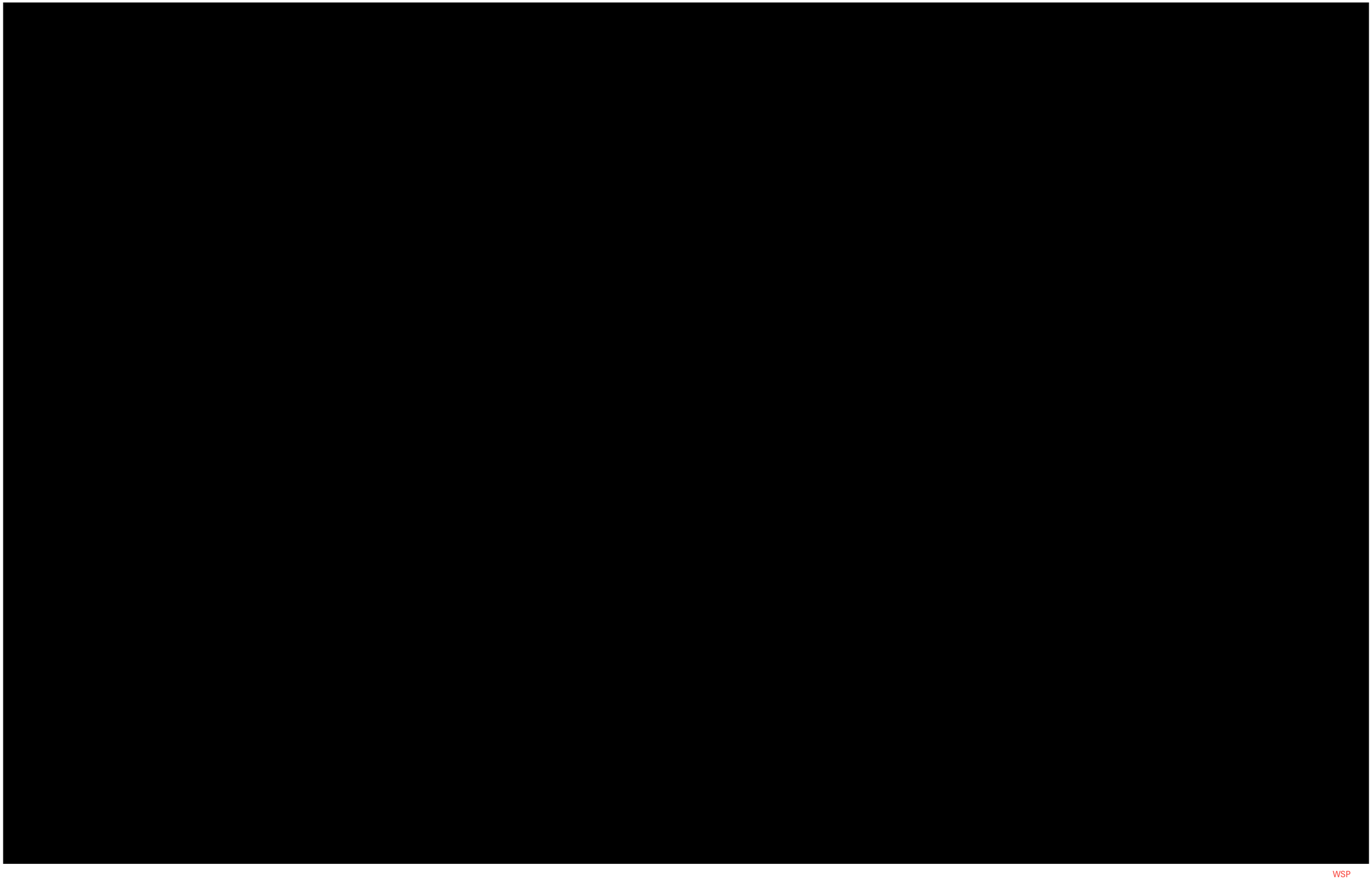

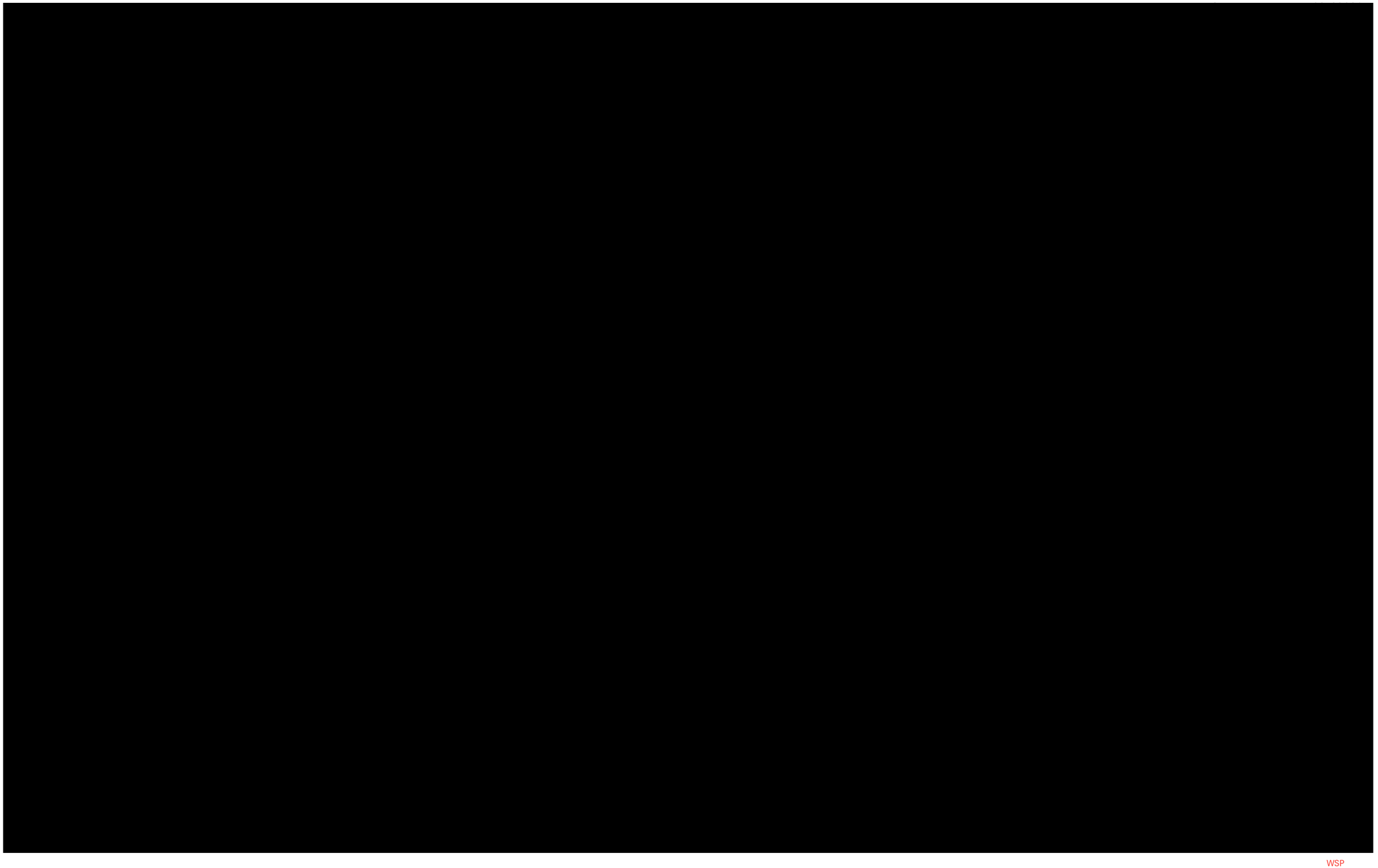

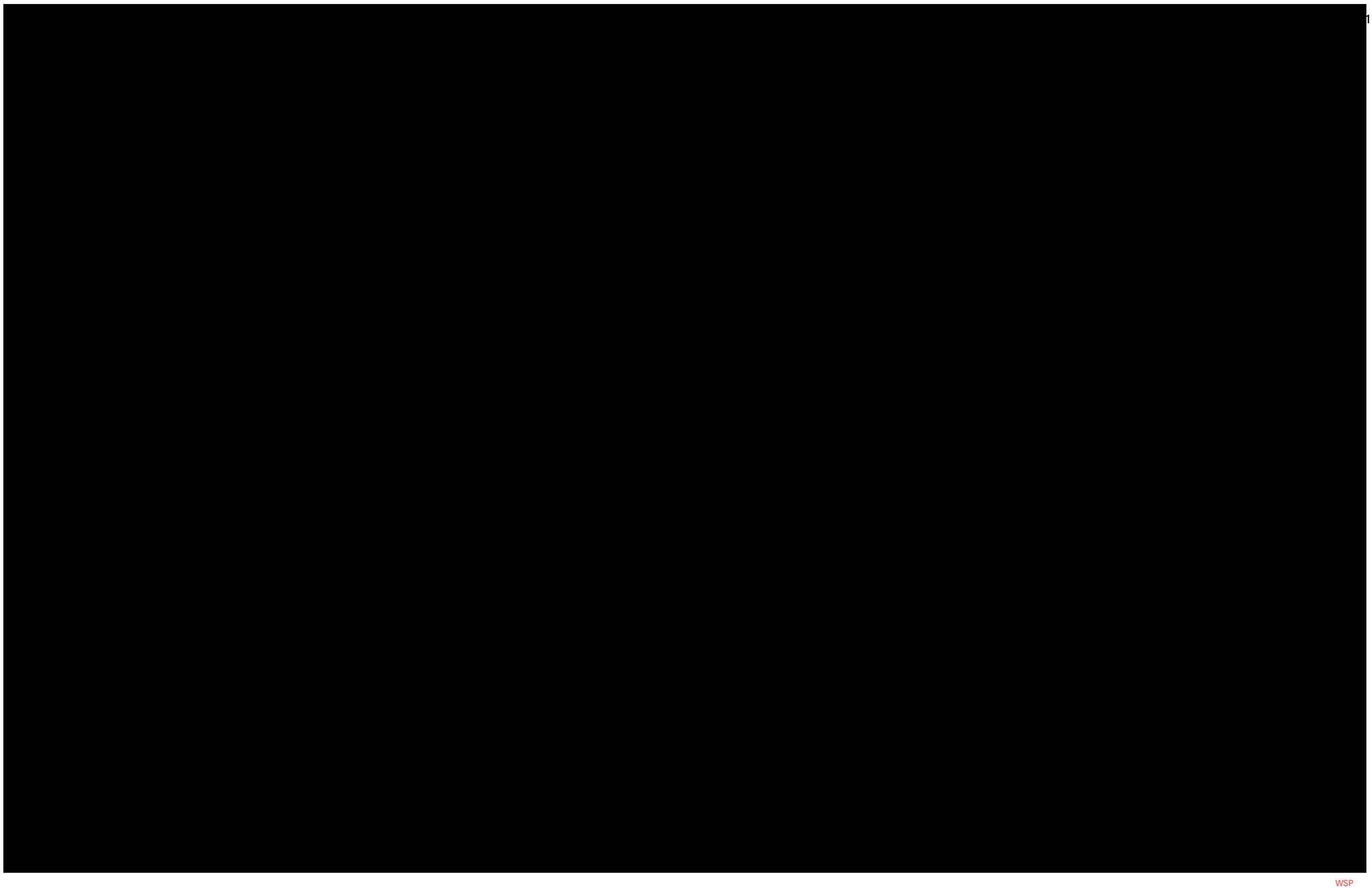

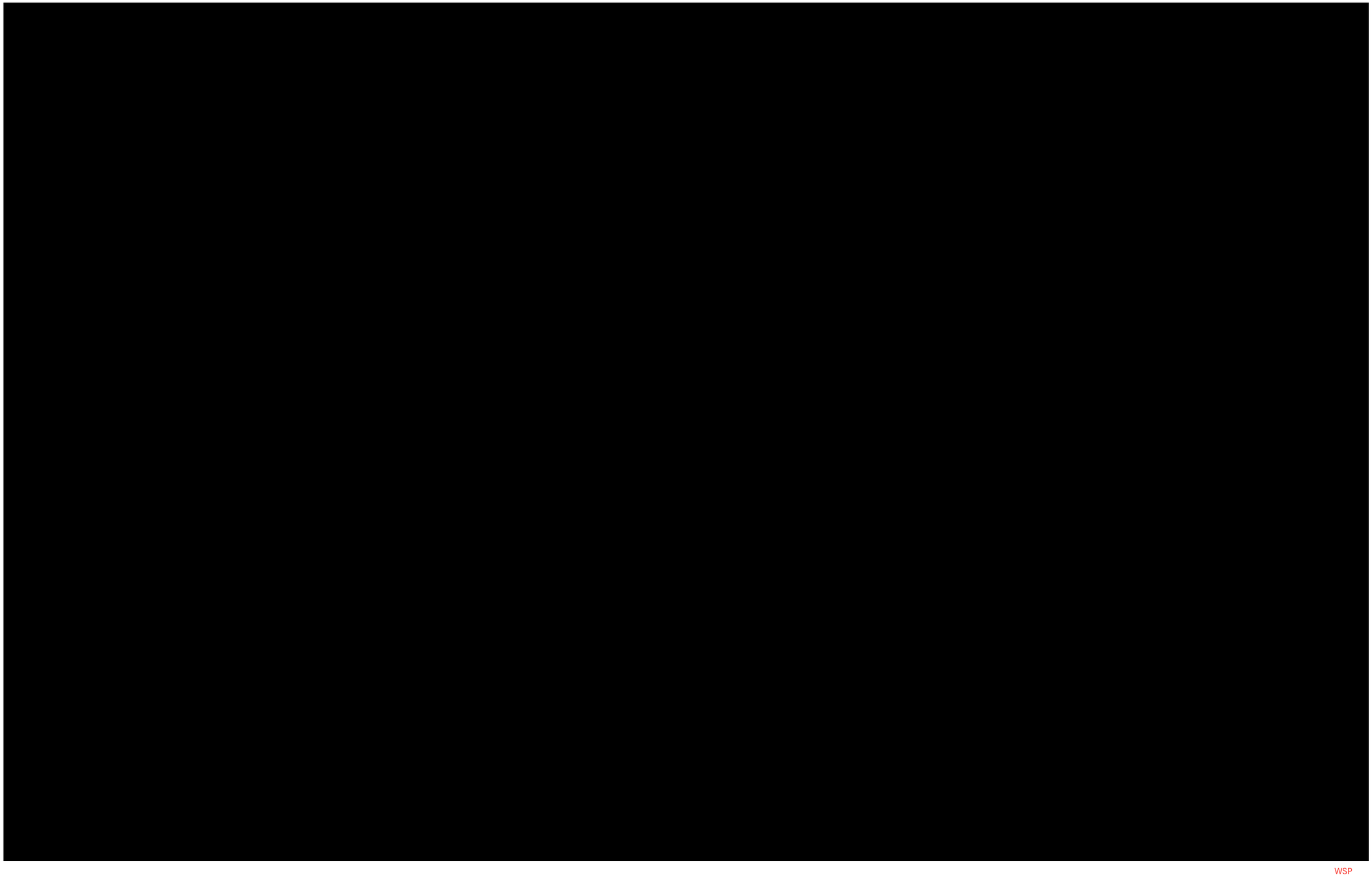

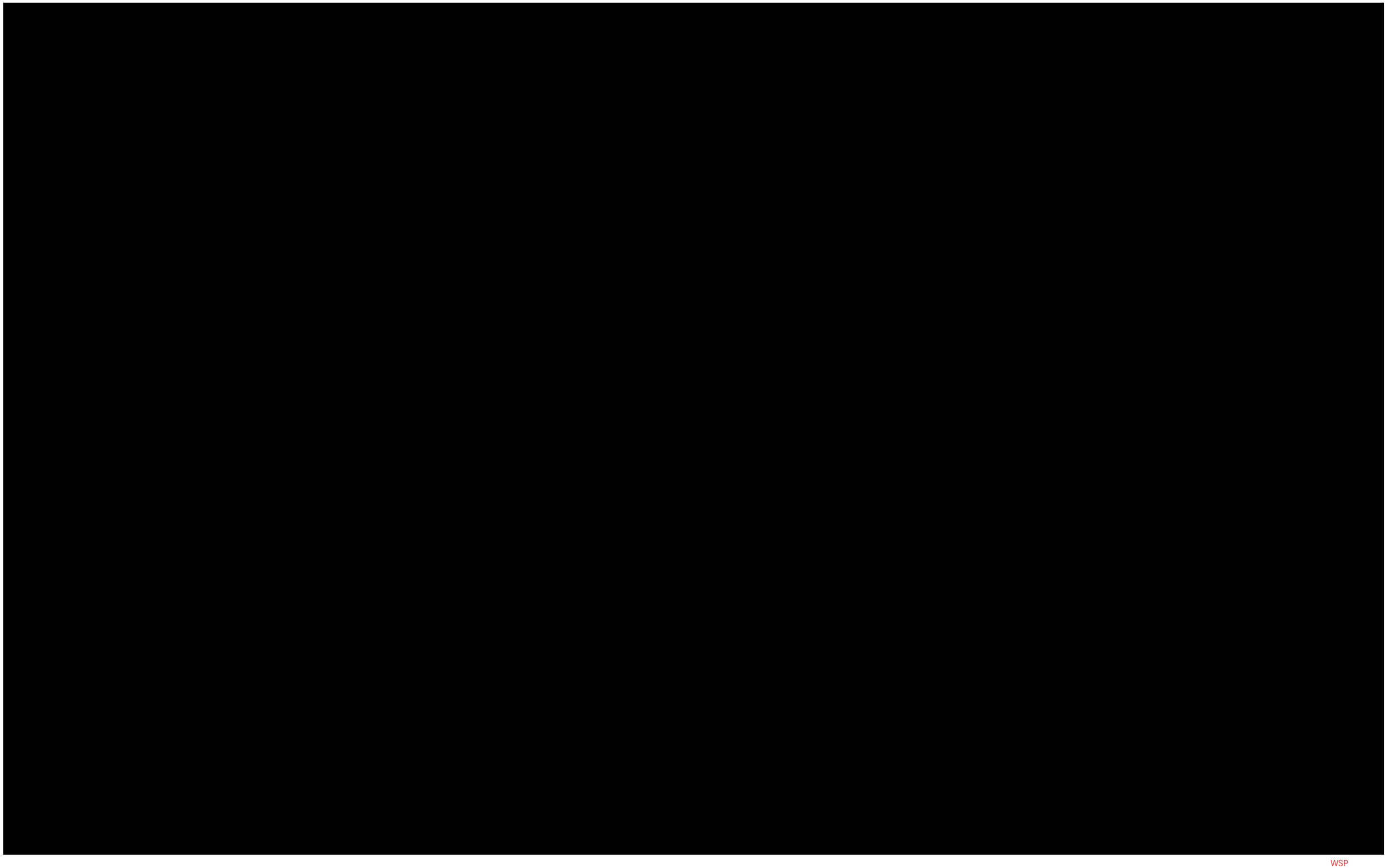

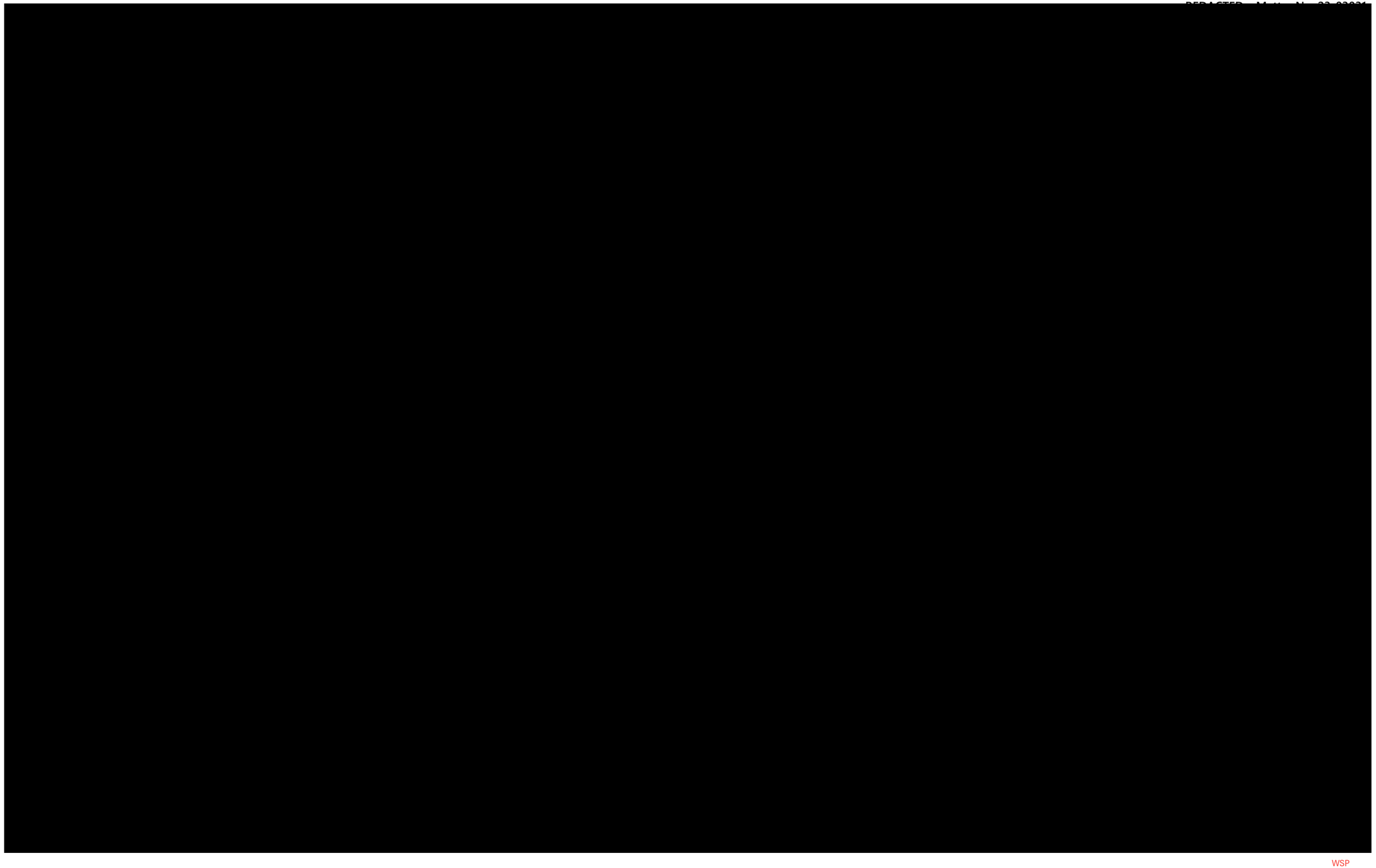

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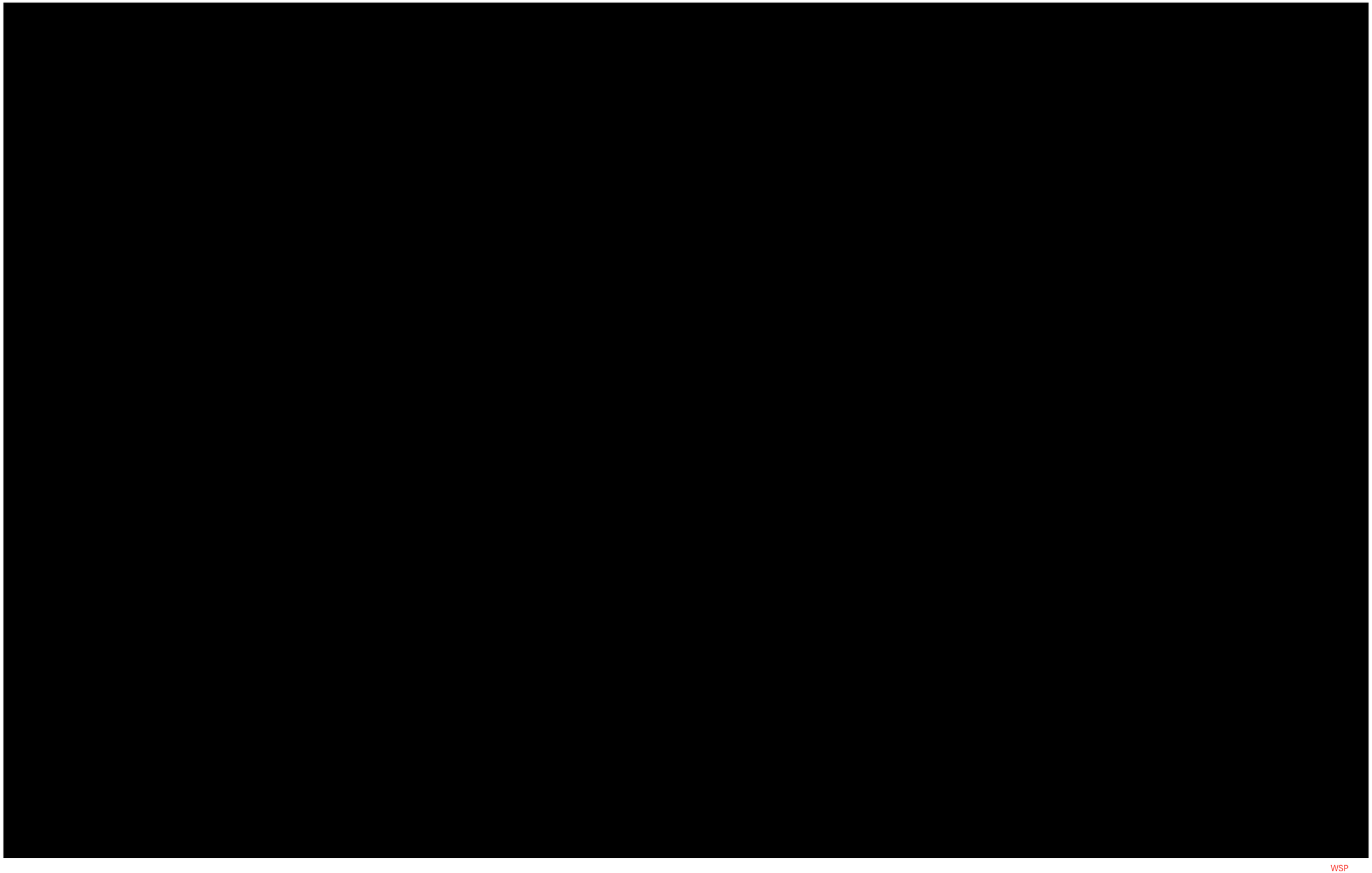

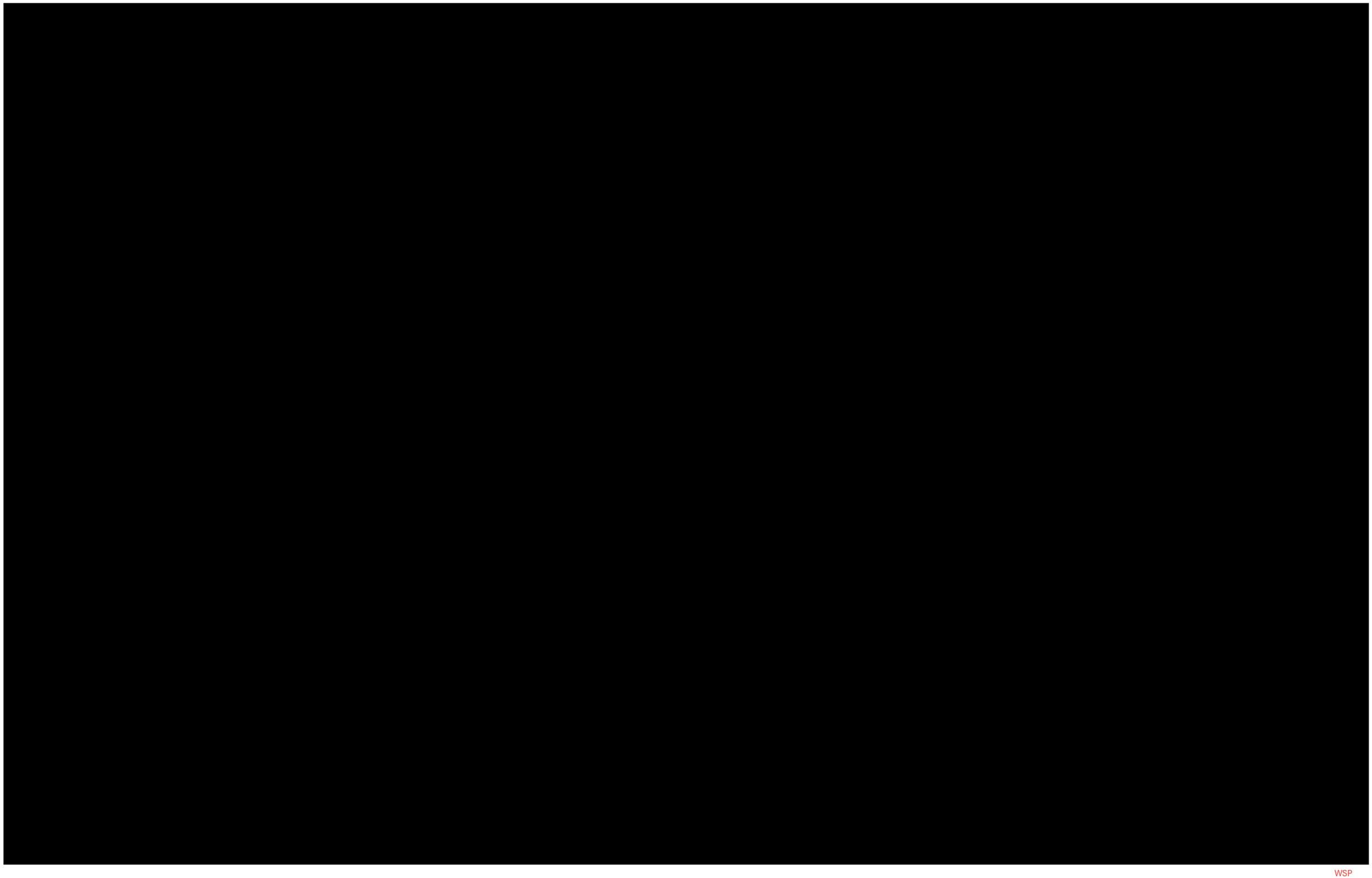

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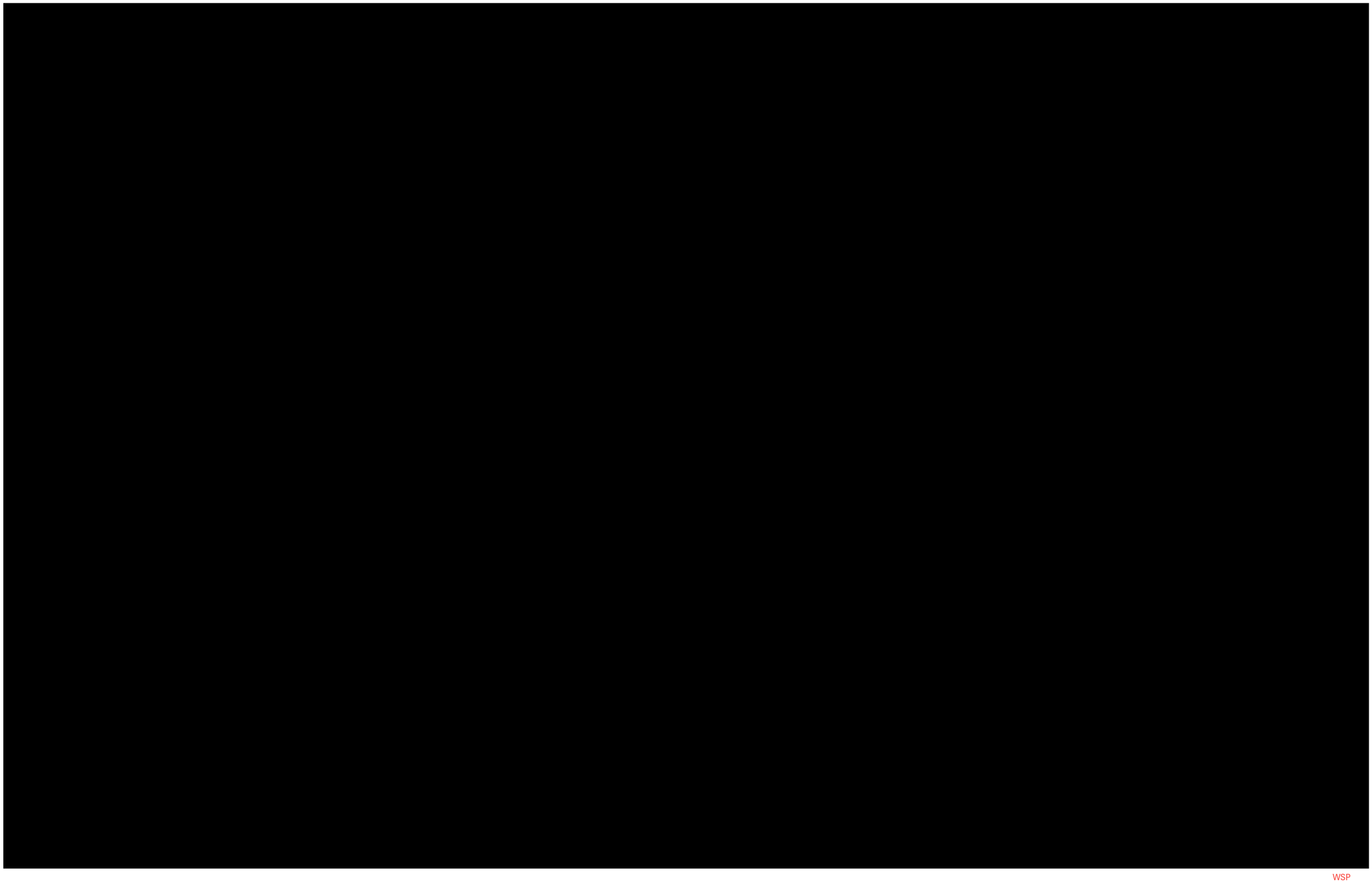

APPENDIX

B Site Characterization Data

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Appendix B-1 Site Characterization Data at Breeding Bird Survey Points, Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Point	Robel Date	Survey Period	Habitat Type	Distance from Road/ Trail (m)	Distance from Hedgerow/ Woods (m)	Distance to Nearest Shrub (m)	% Grass	% Forb	% Bare	% Woody	Dominant Grass	Dominant Forb	Ave. Veg. Height (cm)	Litter Depth (dm)	N Robel (dm)	S Robel (dm)	E Robel (dm)	W Robel (dm)	Average Robel (dm)	Veg. Density	Invasive Species (within 25 m radius)	Management (e.g., mowing)
B1	6/25/2024	7	Pasture	400	100	100	60	40	0	0	Reed Canary	Juncus Effusus	55	0	3	2	2.5	3	2.6	Sparse	None	Moderately grazed for duration of surveys.
B2	6/25/2024	7	Alfalfa field	40	15	15	0	80	20	0	None	Alfalfa	39	0	2	2	4	3	2.8	Sparse	None	Moderately grazed for duration of surveys.
B3	6/25/2024	7	Alfalfa field	200	10	10	0	70	30	0	None	Alfalfa	41	0	3	2.5	3.5	3.5	3.1	Sparse	Bull thistle	Mowed before 6/12/24.
B4	6/4/2024	5	Alfalfa field	52	113	113	0	100	0	0	N/A	Alfalfa	45	0	5	6	5	5	5.3	Moderate	None	Mowed before 6/12/24.
B5	6/25/2024	7	Alfalfa field	3	10	10	20	40	40	0	Timothy	Alfalfa	40	1	2	4	3.5	3.5	3.3	Sparse	None	Mowed before 6/12/24.
B6	6/4/2024	5	Hayfield	142	147	147	100	0	0	0	Orchard Grass	N/A	70	1	3.5	3	3	3	3.1	Sparse	None	Mowed before 6/5/24.
B7	6/11/2024	6	Hay field	150	140	140	85	15	0	0	Orchard Grass	Alfalfa	97	5	6	6.5	7	6	6.4	Moderate	None	Mowed before 6/5/24.
B8	6/11/2024	6	Hay field	100	90	300	80	15	5	0	Orchard Grass	White Clover	28	1	1.5	3	2	2	2.1	Moderate	None	Mowed before 6/5/24.
B9	7/16/2024	10	Hay field	475	135	135	45	55	0	0	Timothy	Alfalfa	24	2	1.5	1	2	2	1.6	Moderate	None	Mowed before 6/5/24.
B10	6/11/2024	6	Hay field	110	130	130	70	30	0	0	Orchard Grass	Vetch spp.	52	3	4	3.5	4.5	5	4.3	Moderate	None	Mowed before 6/5/24.
B11	6/11/2024	6	Hayfield	485	120	120	25	70	5	0	Kentucky Bluegrass	Alfalfa	18	1	0.5	0.5	1.5	1	0.9	Moderate	None	Mowed before 6/5/24.
B12	7/9/2024	9	Row Crop	10	90	90	0	70	30	0	N/A	Soybean	34	1	0	3	2.5	3.5	2.3	Sparse	none	Row crop. No-till farming.
B13	7/9/2024	9	Other - field crop	250	150	150	99	1	0	0	Common Oat	Clover spp.	80	0	7	7	7	1	5.5	Moderate	None	Planted to oats before the survey period.
B14	7/9/2024	9	Other - field crop	120	120	120	99	1	0	0	Common Oat	Clover spp.	75	1	5	4	0	0	2.3	Sparse	None	Planted to oats before the survey period.
B15	7/9/2024	9	Row Crop	80	80	80	30	0	70	0	Corn	N/A	95	0	9.5	7	0	0	4.1	Sparse	None	Tilled before 5/23/2024.
B16	7/9/2024	9	Other - field crop	110	130	130	99	1	0	0	Common Oat	Clover spp.	98	2	8	6.5	5.5	8	7.0	Sparse	None	Planted to oats before the survey period.
B17	7/9/2024	9	Row Crop	90	80	80	0	70	30	0	N/A	Soybean	36	1	0	2.5	3.5	3.5	2.4	Sparse	None	Row crop. No-till farming.
B18	7/18/2024	10	Hayfield	255	105	105	75	25	0	0	Timothy	Alfalfa	32	1	2	3	2	3	2.5	Rank	None	Mowed during survey period.
B19	6/12/2024	6	Hay field	150	70	70	70	30	0	0	Kentucky Bluegrass	Alfalfa	85	5	3	2	3	3	2.8	Moderate	None	Mowed during survey period.
B20	7/18/2024	10	Hayfield	295	115	115	5	90	5	0	Barnyard Grass	Alfalfa	26	1	2	2	2	2	2.0	Moderate	None	Mowed during survey period.
B21	6/4/2024	5	Hayfield	71	106	106	97	3	0	0	Orchard Grass	White Clover	74	1	3.5	3	3	3	3.1	Moderate	None	Mowed during survey period.
B22	7/17/2024	10	Row Crop	545	90	90	60	0	30	10	Corn	None	185	0	16	17	0	0	8.3	Sparse	None	Tilled. Planted to corn in spring.
B23	7/17/2024	10	Row Crop	345	80	80	55	0	30	15	Corn	None	165	0	0	0	15.5	16	7.9	Sparse	None	Tilled. Planted to corn in spring.
B24	7/17/2024	10	Row Crop	250	100	100	70	2	28	0	Corn	Dandelion	155	0	14.5	18	0	0	8.1	Sparse	None	Tilled. Planted to corn in spring.
B25	7/17/2024	10	Row Crop	300	90	90	65	0	35	0	Corn	None	93	0	9	8	0	0	4.3	Sparse	None	Tilled before 6/5/24.
B26	7/17/2024	10	Row Crop	190	200	200	65	0	35	0	Corn	None	95	0	8	8.5	0	0	4.1	Sparse	None	Tilled before 6/5/24.

Appendix B-1 Site Characterization Data at Breeding Bird Survey Points, Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Point	Robel Date	Survey Period	Habitat Type	Distance from Road/ Trail (m)	Distance from Hedgerow/ Woods (m)	Distance to Nearest Shrub (m)	% Grass	% Forb	% Bare	% Woody	Dominant Grass	Dominant Forb	Ave. Veg. Height (cm)	Litter Depth (dm)	N Robel (dm)	S Robel (dm)	E Robel (dm)	W Robel (dm)	Average Robel (dm)	Veg. Density	Invasive Species (within 25 m radius)	Management (e.g., mowing)
B27	7/17/2024	10	Row Crop	475	290	290	65	0	35	0	Corn	None	104	0	10	9.5	0	0	4.9	Sparse	None	Tilled before 6/5/24.
B28	7/17/2024	10	Row Crop	350	120	120	58	2	40	0	Corn	Dandelion	94	0	8	7	0	0	3.8	Sparse	none	Tilled before 6/5/24.
B29	7/17/2024	10	Row Crop	875	135	135	65	0	35	0	Corn	None	94	0	8.5	8.5	0	0	4.3	Sparse	None	Tilled before 6/5/24.
B30	7/17/2024	10	Row Crop	100	70	70	60	1	36	3	Corn	Dandelion	95	0	9	8.5	0	0	4.4	Sparse	none	Tilled before 6/5/24.
B31	7/18/2024	10	Row Crop	235	80	80	50	0	46	4	Corn	None	76	0	6	7	0	0	3.3	Sparse	None	Tilled. Planted to corn in spring.
B32	7/18/2024	10	Row Crop	300	95	95	50	0	48	2	Corn	None	77	0	6.5	7	0	0	3.4	Sparse	None	Tilled. Planted to corn in spring.
B33	7/18/2024	10	Row Crop	115	105	105	60	0	40	0	Corn	None	87	0	8	8.5	0	0	4.1	Sparse	None	Tilled. Planted to corn in spring.
B34	7/18/2024	10	Row Crop	50	90	90	58	0	40	2	Corn	None	97	0	9	9	0	0	4.5	Sparse	None	Tilled. Planted to corn in spring.
B35	7/18/2024	10	Row Crop	65	55	55	50	0	40	10	Corn	None	115	0	11	10	0	0	5.3	Sparse	None	Tilled. Planted to corn in spring.
B36	7/17/2024	10	Row Crop	95	110	110	70	1	29	0	Corn	Curly Dock	135	0	16.5	13.5	0	0	7.5	Sparse	None	Tilled. Planted to corn in spring.
B37	7/17/2024	10	Row Crop	95	100	100	70	1	29	0	Corn	Plantain sp.	185	0	18	16	0	0	8.5	Sparse	None	Tilled. Planted to corn in spring.
B38	7/17/2024	10	Row Crop	620	130	130	65	0	35	0	Corn	None	105	0	10.5	10	0	0	5.1	Sparse	None	Tilled before 6/5/24.
B40	6/26/2024	8	Scrub-Shrub	2000	20	20	50	40	0	10	Timothy	Tall goldenrod	83	5	6.5	6	4	2	4.6	Moderate	None	Unmanaged field reverted to scrub-shrub.
B41	7/19/2024	10	Row Crop	265	40	40	5	75	5	15	Sweet Vernal	Soybean	23	0	1.5	1.5	2.5	2.5	2.0	Moderate	Erect Knotweed	Tilled. Planted to soybeans in late spring
B42	6/13/2024	6	Hay field	300	40	40	80	20	0	0	Orchard Grass	Meadow Hawkweed	91	3	8	6	7	5	6.5	Moderate	Meadow Hawkweed	Unmanaged for duration of study.
B43	6/25/2024	8	Hay field	700	75	75	99	1	0	0	Orchard Grass, timothy	Tufted vetch	66	3	6.5	5.5	5.5	6	5.9	Moderate	None	Mowed before 7/2/24.
B44	6/25/2024	8	Hay field	1700	60	60	98	1	1	0	Timothy, Orchard grass	Tufted vetch	64	5	5	4.5	4.5	5	4.8	Moderate	None	Mowed before 7/2/24.
B45	6/25/2024	8	Hay field	1500	75	75	99	1	0	0	Orchard grass, smooth brome	Tufted vetch	95	4	7.5	8.5	7.5	7.5	7.8	Moderate	None	Mowed before 7/2/24.
B46	6/11/2024	6	Hay field	130	200	200	99	1	0	0	Orchard Grass	Tufted vetch	140	10	7	8	7	7	7.3	Moderate	None	Mowed before 7/2/24.
B47	7/16/2024	10	Row Crop	260	75	23	72	1	15	12	Corn	Dandelion	90	0	0	0	6.5	9	3.9	Sparse	None	Tilled. Planted to corn in spring.
B48	7/16/2024	10	Row Crop	250	105	55	60	15	20	5	Corn	Horsetail	87	0	6	7.5	0	0	3.4	Sparse	None	Tilled. Planted to corn in spring.
B49	7/16/2024	10	Row Crop	365	85	85	50	35	10	5	Corn	Dandelion	105	0	9.5	9.5	0	0	4.8	Sparse	None	Tilled. Planted to corn in spring.
B50	7/17/2024	10	Row Crop	110	150	150	70	0	30	0	Corn	None	88	0	9	8.5	0	0	4.4	Sparse	None	Tilled. Planted to corn in spring.
B51	7/17/2024	10	Row Crop	480	105	105	70	0	30	0	Corn	None	105	0	10	11	0	0	5.3	Sparse	None	Tilled. Planted to corn in spring.
B52	7/17/2024	10	Row Crop	200	135	135	70	0	30	0	Corn	None	94	0	8.5	8.5	0	0	4.3	Sparse	None	Tilled. Planted to corn in spring.

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Point	Robel Date	Survey Period	Habitat Type	Distance from Road/ Trail (m)	Distance from Hedgerow/ Woods (m)	Distance to Nearest Shrub (m)	% Grass	% Forb	% Bare	% Woody	Dominant Grass	Dominant Forb	Ave. Veg. Height (cm)	Litter Depth (dm)	N Robel (dm)	S Robel (dm)	E Robel (dm)	W Robel (dm)	Average Robel (dm)	Veg. Density	Invasive Species (within 25 m radius)	Management (e.g., mowing)
B50	7/17/2024	10	Row Crop	740	125	125	70	0	30	0	Corn	None	93	0	8	9.5	0	0	4.4	Sparse	None	Tilled. Planted to corn in spring.
B54	7/17/2024	10	Row Crop	490	90	90	67	0	30	3	Corn	None	92	0	8	9	0	0	4.3	Sparse	None	Tilled. Planted to corn period 4.
B55	7/17/2024	10	Row Crop	345	95	95	67	0	30	3	Corn	None	113	0	10.5	11	0	0	5.4	Sparse	None	Tilled. Planted to corn in spring.
B56	7/17/2024	10	Row Crop	320	100	100	70	2	28	0	Corn	Lambsquarter	170	0	0	0	15	17	8.0	Sparse	None	Tilled. Planted to corn in spring.
B57	7/17/2024	10	Row Crop	415	105	105	70	0	30	0	Corn	None	165	0	0	0	14	13.5	6.9	Sparse	None	Tilled. Planted to corn in spring.
B58	7/17/2024	10	Row Crop	615	80	80	60	2	28	10	Corn	Lambsquarter	180	0	0	0	17	17.5	8.6	Sparse	None	Tilled. Planted to corn in spring.
B59	6/25/2024	8	Old field	700	120	2	40	25	30	5	Pointed Broom Sedge, Timothy	Horseweed	46	0	3.5	2.5	2	3.5	2.9	Sparse	None	Unmanaged for duration of study.
B60	7/17/2024	10	Row Crop	345	105	105	70	5	25	0	Corn	Lambsquarter	168	0	0	0	12.5	14	6.6	Sparse	None	Tilled. Planted to corn in spring.
B61	7/10/2024	9	Other - Field crop	200	75	75	100	0	0	0	Common oat	N/A	110	0	10	10	10	9	9.8	Moderate	None	Planted to oats before the survey period.
B62	7/10/2024	9	Other - Field crop	6	10	10	40	25	30	5	Common oat	Bedstraws spp.	85	1	0	0	5	6.5	2.9	Sparse	None	Planted to oats before the survey period.
B63	6/25/2024	8	Scrub-Shrub	700	50	10	60	30	0	10	Smooth Brome, Timothy	Tall goldenrod	90	4	6.5	8	6.5	6	6.8	Rank	None	Unmanaged for duration of study.
B64	7/17/2024	10	Row Crop	460	45	45	60	0	25	5	Corn	None	150	0	0	0	13.5	14	6.9	Sparse	None	Tilled. Planted to corn in spring.
B65	7/17/2024	10	Row Crop	120	200	200	70	0	30	0	Corn	None	165	0	0	0	14	14	7.0	Sparse	None	Tilled. Planted to corn in spring.
B66	7/17/2024	10	Row Crop	120	115	115	70	5	25	0	Corn	Lambsquarter	175	0	0	0	15	15	7.5	Sparse	None	Tilled. Planted to corn in spring.
B67	6/26/2024	8	Old field	150	105	50	35	60	0	5	Soft rush	Goldenrod Spp.	95	5	9.5	9.5	8.5	8	8.9	Rank	None	Unmanaged for duration of study.
B68	7/10/2024	9	Row Crop	30	85	30	0	50	50	0	N/A	Soybean	18	0	0	0	0	0	0.0	Sparse	None	Row crop. No-till farming.
B69	7/9/2024	10	Row Crop	367	85	85	65	0	35	0	Corn	N/A	121	0	7	7	0	0	3.5	Sparse	None	Tilled. Planted to corn in spring.
B70	7/10/2024	9	Row Crop	140	150	140	50	0	50	0	Corn	N/A	115	0	11	11	0	0	5.5	Sparse	None	Tilled. Planted to corn in spring.
B71	7/9/2024	10	Row Crop	150	66	66	65	0	35	0	Corn	N/A	112	0	0	0	8	6	3.5	Sparse	None	Tilled. Planted to corn in spring.
B72	7/18/2024	10	Row Crop	920	110	110	60	3	37	0	Corn	Erect Knotweed	72	0	5.5	6.5	0	0	3.0	Sparse	None	Tilled. Planted to corn in spring.
B73	7/17/2024	10	Row Crop	130	95	95	65	0	30	5	Corn	None	105	0	11	10	0	0	5.3	Sparse	None	Tilled. Planted to corn in spring.
B74	7/16/2024	10	Row Crop	110	130	130	60	30	10	0	Corn	Aster sp.	82	2	2	1	8.5	6	4.4	Sparse	Erect Knotweed	Tilled. Planted to corn in spring.
B75	7/17/2024	10	Row Crop	130	95	95	68	0	30	2	Corn	None	165	0	0	0	15	16	7.8	Sparse	None	Tilled. Planted to corn in spring.

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Point	Robel Date	Survey Period	Habitat Type	Distance from Road/ Trail (m)	Distance from Hedgerow/ Woods (m)	Distance to Nearest Shrub (m)	% Grass	% Forb	% Bare	% Woody	Dominant Grass	Dominant Forb	Ave. Veg. Height (cm)	Litter Depth (dm)	N Robel (dm)	S Robel (dm)	E Robel (dm)	W Robel (dm)	Average Robel (dm)	Veg. Density	Invasive Species (within 25 m radius)	Management (e.g., mowing)
B76	7/17/2024	10	Row Crop	1035	100	100	70	0	30	0	Corn	None	83	0	7	8.5	0	0	3.9	Sparse	None	Tilled. Planted to corn in spring.
B77	7/17/2024	10	Row Crop	115	95	95	70	0	27	3	Corn	None	87	0	8.5	8.5	0	0	4.3	Sparse	None	Tilled. Planted to corn in spring.

Note: Dominant plant species and percentages based on a 25-meter radius plot around the center point.

Appendix B-2 Site Characterization Data at Marsh Bird Survey Points, Chateaugay Wind Repowering Project, Franklin County, New York, May to June 2024

Survey Point	Date	Water Depth (cm)	% open water	% exposed mud, sand, or rock	% submersed and floating herbaceous plants	% emergent herbaceous plants	% scrub-shrub	% trees	% road or trail	Marsh edge	Estimated Marsh vegetation height (cm)	Dispersion Pattern	Wetland Type	Wetland Permanency	Cattail %	Other Grasses %	Sedges & Relatives %	Rushes & Bulrushes %	Water Plantain %	Others %	Wetland Management
MB1	6/27/2024	5-25	5	0	0	30	55	10	0	Forest	500	51-75% clustered	PSS	Permanent	0	0	10-25%	0	10-25%	50-75%	None
MB2	6/27/2024	5-25	0	0	0	55	40	5	0	Forest	200	76-100% clustered	PSS/Bog	Permanent	0	0	0	0	0	75-100%	None

Key:
PSS = Palustrine scrub shrub wetland

APPENDIX

C Species Summary by Survey Point and Survey Period

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Table C-1 Abundance of Birds within 100-meter Survey Radius Per Species by Survey Point, Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

	Survey Point																																							
Common Name	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**B8**	**B9**	**B10**	**B11**	**B12**	**B13**	**B14**	**B15**	**B16**	**B17**	**B18**	**B19**	**B20**	**B21**	**B22**	**B23**	**B24**	**B25**	**B26**	**B27**	**B28**	**B29**	**B30**	**B31**	**B32**	**B33**	**B34**	**B35**	**B36**	**B37**	**B38**	**B40**
Canada Goose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mallard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wild Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mourning Dove	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0
Killdeer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey Vulture	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
[redacted]																																							
Yellow-bellied Sapsucker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Downy Woodpecker	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hairy Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Northern Flicker	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Kestrel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Merlin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alder Flycatcher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2
Eastern Phoebe	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Great Crested Flycatcher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eastern Kingbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warbling Vireo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-eyed Vireo	1	1	3	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	1	0	1	0	1	0	0	0	0	0
Blue Jay	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Crow	3	1	0	0	1	0	0	0	1	2	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	0	0	1	9	0	0	0	15	0	1	0	0
Common Raven	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black-capped Chickadee	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	6	0	0	0	2	1	0	0	0	2
Tree Swallow	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barn Swallow	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	3	0	1	1	0	0	5	0	9	2	0	2	0	0
Red-breasted Nuthatch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
European Starling	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Gray Catbird	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0
Brown Thrasher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
Eastern Bluebird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Robin	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	7	0	2	0	1	0	0	0	0	4
Cedar Waxwing	1	0	0	0	0	0	0	0	5	0	0	0	4	0	0	0	0	0	0	0	2	0	5	0	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0
American Pipit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
House Finch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purple Finch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pine Siskin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Goldfinch	3	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	4	0	3	0	2	0	0	3	5	0	0	2	1	0	3	1	1
Chipping Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Field Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dark-eyed Junco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White-throated Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
[redacted]																																							
Savannah Sparrow	0	1	15	8	3	19	21	23	22	18	27	8	18	19	0	9	23	19	10	6	14	0	0	9	0	0	0	3	3	3	0	1	4	3	5	5	11	0	0
Song Sparrow	12	8	2	1	3	0	1	0	1	1	2	1	2	2	5	0	2	0	2	0	2	7	1	6	1	0	1	2	0	3	5	9	1	4	2	0	3	1	9
Bobolink	0	9	4	0	0	5	6	6	2	1	2	0	0	0	0	0	5	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eastern Meadowlark	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-winged Blackbird	0	2	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Grackle	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	1
Ovenbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Black-and-white Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Nashville Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mourning Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Common Yellowthroat	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	3
Yellow Warbler	2	5	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	7
Chestnut-sided Warbler	0	1	1	0	2	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	4	3	4	0	0	0	1	0	3	4	1	3	3	2	1	2	1	2
Yellow-rumped Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarlet Tanager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Northern Cardinal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Rose-breasted Grosbeak	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Indigo Bunting	0	0	3	0	1	0	0	0	0	0	0	1	2	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	0	2	2	0	1	0	0
Total Birds	**96**	**34**	**34**	**9**	**15**	**26**	**31**	**30**	**31**	**27**	**33**	**16**	**26**	**22**	**20**	**9**	**31**	**24**	**20**	**8**	**19**	**19**	**15**	**35**	**9**	**10**	**3**	**10**	**6**	**53**	**29**	**23**	**9**	**28**	**32**	**7**	**25**	**3**	**34**
Total Species	**10**	**12**	**9**	**2**	**9**	**3**	**5**	**3**	**5**	**7**	**5**	**8**	**4**	**3**	**5**	**1**	**4**	**3**	**5**	**3**	**4**	**7**	**6**	**10**	**6**	**6**	**2**	**7**	**4**	**21**	**8**	**9**	**4**	**10**	**10**	**3**	**9**	**3**	**11**

Table C-1 Abundance of Birds within 100-meter Survey Radius Per Species by Survey Point, Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Common Name	Survey Point																																			Total Birds
	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72	B73	B74	B75	B76	B77	
Canada Goose	0	0	0	0	0	0	0	0	1	0	0	0	14	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	**71**
Mallard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Wild Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	**1**
Mourning Dove	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Killdeer	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	**4**
Turkey Vulture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**5**
[redacted]																																						
Yellow-bellied Sapsucker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Downy Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Hairy Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Northern Flicker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	**4**
American Kestrel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Merlin	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Alder Flycatcher	0	2	0	0	0	0	2	0	0	2	0	1	0	2	0	0	0	0	2	2	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	2	0	**31**
Eastern Phoebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**4**
Great Crested Flycatcher	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Eastern Kingbird	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Warbling Vireo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	**1**
Red-eyed Vireo	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0	0	2	0	**25**
Blue Jay	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7**
American Crow	0	0	0	4	0	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5	0	2	0	0	2	2	**59**
Common Raven	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Black-capped Chickadee	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	1	0	0	0	0	0	0	**25**
Tree Swallow	0	0	12	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	**27**
Barn Swallow	6	0	12	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	1	0	0	**57**
Red-breasted Nuthatch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
European Starling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**55**
Gray Catbird	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	**8**
Brown Thrasher	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	**7**
Eastern Bluebird	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	**3**
American Robin	2	0	1	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	2	0	1	0	1	**58**
Cedar Waxwing	2	0	4	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	4	0	**51**
American Pipit	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
House Finch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Purple Finch	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Pine Siskin	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
American Goldfinch	2	0	2	0	0	1	0	0	0	0	2	0	0	0	0	1	0	2	4	2	1	3	4	2	2	1	2	0	0	0	0	0	0	0	2	0	1	**66**
Chipping Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	**4**
Field Sparrow	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Dark-eyed Junco	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
White-throated Sparrow	1	0	0	0	0	0	0	0	0	0	4	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	2	0	0	0	0	0	3	**19**
[redacted]																																						
Savannah Sparrow	0	2	3	17	8	10	1	0	0	0	0	0	0	0	0	4	1	0	2	1	0	0	0	1	0	7	0	0	1	3	0	0	0	8	2	0	0	**401**
Song Sparrow	11	6	10	13	12	2	7	1	2	2	5	2	0	8	1	0	0	2	13	4	2	10	15	1	0	2	16	7	3	0	5	1	2	1	1	3	3	**275**
Bobolink	0	2	4	9	7	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	**91**
Eastern Meadowlark	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	**10**
Red-winged Blackbird	8	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	55	0	0	0	0	0	3	1	0	0	0	**87**
Common Grackle	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	**16**
Ovenbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Black-and-white Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	**4**
Nashville Warbler	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Mourning Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Common Yellowthroat	2	3	2	1	1	0	1	0	0	3	2	1	0	0	0	0	0	0	1	0	0	0	2	0	0	0	3	2	1	0	2	0	0	0	0	1	0	**37**
Yellow Warbler	5	1	1	4	0	0	3	0	0	5	6	4	0	4	0	0	0	0	3	1	0	0	4	0	0	0	1	0	3	0	2	0	1	0	0	1	2	**73**
Chestnut-sided Warbler	1	1	3	3	1	0	2	0	1	3	3	0	0	1	0	0	1	0	7	2	0	0	5	0	0	1	1	1	1	0	3	0	0	0	1	6	0	**89**
Yellow-rumped Warbler	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**
Scarlet Tanager	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
Northern Cardinal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Rose-breasted Grosbeak	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Indigo Bunting	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3	2	1	2	0	0	0	0	0	0	0	0	0	0	0	1	**34**
Total Birds	**46**	**18**	**57**	**57**	**36**	**46**	**16**	**1**	**7**	**26**	**39**	**12**	**14**	**64**	**4**	**5**	**3**	**5**	**43**	**13**	**3**	**18**	**51**	**8**	**5**	**15**	**92**	**12**	**13**	**4**	**24**	**4**	**13**	**15**	**10**	**34**	**16**	**1760**
Total Species	**15**	**8**	**13**	**11**	**7**	**9**	**6**	**1**	**6**	**13**	**19**	**8**	**1**	**9**	**3**	**2**	**3**	**3**	**14**	**7**	**2**	**4**	**12**	**6**	**3**	**7**	**14**	**5**	**7**	**2**	**10**	**3**	**8**	**6**	**8**	**10**	**10**	**62**

Table C-2 Abundance of Birds within 100-meter Survey Radius Per Species by Survey Period, Chateaugay Wind Repower Project, Franklin County, New York, May to July 2024

Common Name	Survey Period and Dates										
	1	2	3	4	5	6	7	8	9	10	
	5/1, 5/2, 5/3	5/7, 5/8, 5/9	5/14, 5/16, 5/17, 5/21, 5/22	5/23, 5/29, 5/30, 5/31	6/4, 6/5, 6/6, 6/7, 6/8	6/11, 6/12, 6/13, 6/14	6/17, 6/19, 6/20, 6/21, 6/25	6/25, 6/26, 6/27, 6/28	7/2, 7/3, 7/9, 7/10, 7/11	7/12, 7/13, 7/16, 7/17, 7/18, 7/19	Total Birds
Canada Goose	14	1	35	21	0	0	0	0	0	0	71
Mallard	0	0	0	0	0	0	0	0	0	2	2
Wild Turkey	0	0	0	0	0	1	0	0	0	0	1
Mourning Dove	0	0	0	2	0	0	1	0	1	1	5
Killdeer	0	1	1	0	0	0	0	0	2	0	4
Turkey Vulture	0	4	0	0	0	1	0	0	0	0	5
[redacted]											
Yellow-bellied Sapsucker	0	0	0	0	0	0	0	0	1	0	1
Downy Woodpecker	0	0	0	0	0	0	1	0	0	0	1
Hairy Woodpecker	1	0	0	0	0	0	0	0	0	0	1
Northern Flicker	0	0	0	1	1	0	1	1	0	0	4
American Kestrel	0	0	1	0	1	0	0	0	0	0	2
Merlin	0	0	1	0	0	0	0	0	0	0	1
Alder Flycatcher	0	0	3	7	2	5	7	0	2	5	31
Eastern Phoebe	0	0	0	0	0	0	0	0	2	2	4
Great Crested Flycatcher	0	0	1	0	0	0	0	0	0	0	1
Eastern Kingbird	0	1	0	0	0	0	1	0	0	0	2
Warbling Vireo	0	0	0	1	0	0	0	0	0	0	1
Red-eyed Vireo	0	0	1	5	2	1	6	3	2	5	25
Blue Jay	2	2	1	0	0	0	0	0	2	0	7
American Crow	1	2	9	4	0	23	7	7	6	0	59
Common Raven	0	0	0	0	0	1	0	0	0	0	1
Black-capped Chickadee	1	5	0	1	0	0	3	0	9	6	25
Tree Swallow	0	0	0	0	0	0	3	0	21	3	27
Barn Swallow	0	2	2	5	0	6	0	0	22	20	57
Red-breasted Nuthatch	0	0	0	0	0	0	0	0	1	0	1
European Starling	1	0	1	0	0	0	53	0	0	0	55
Gray Catbird	0	0	1	0	1	0	1	0	4	1	8
Brown Thrasher	1	2	3	0	1	0	0	0	0	0	7
Eastern Bluebird	0	1	2	0	0	0	0	0	0	0	3
American Robin	6	3	2	1	4	1	24	1	10	6	58
Cedar Waxwing	0	0	0	1	0	0	17	5	15	13	51
American Pipit	3	0	0	0	0	0	0	0	0	0	3
House Finch	0	0	0	0	0	0	1	0	0	0	1
Purple Finch	0	0	0	0	0	0	0	0	1	0	1
Pine Siskin	1	0	0	0	0	0	0	0	0	0	1
American Goldfinch	3	1	2	3	2	1	4	3	23	24	66
Chipping Sparrow	1	0	0	0	0	0	0	0	0	3	4

Table C-2 Abundance of Birds within 100-meter Survey Radius Per Species by Survey Period, Chateaugay Wind Repower Project, Franklin County, New York, May to July 2024

Common Name	Survey Period and Dates										
	1	2	3	4	5	6	7	8	9	10	
	5/1, 5/2, 5/3	5/7, 5/8, 5/9	5/14, 5/16, 5/17, 5/21, 5/22	5/23, 5/29, 5/30, 5/31	6/4, 6/5, 6/6, 6/7, 6/8	6/11, 6/12, 6/13, 6/14	6/17, 6/19, 6/20, 6/21, 6/25	6/25, 6/26, 6/27, 6/28	7/2, 7/3, 7/9, 7/10, 7/11	7/12, 7/13, 7/16, 7/17, 7/18, 7/19	Total Birds
Field Sparrow	0	0	0	0	0	0	0	0	1	0	1
Dark-eyed Junco	0	0	0	0	0	0	1	0	0	0	1
White-throated Sparrow	10	4	3	1	0	0	0	0	1	0	19
[redacted]											
Savannah Sparrow	60	39	26	45	43	55	35	26	28	44	401
Song Sparrow	30	31	18	24	18	15	31	18	37	53	275
Bobolink	0	0	13	23	20	17	8	10	0	0	91
Eastern Meadowlark	0	1	0	0	0	5	2	0	1	1	10
Red-winged Blackbird	16	13	7	5	8	10	3	5	4	16	87
Common Grackle	1	0	0	0	0	0	2	0	3	10	16
Ovenbird	0	2	0	0	0	0	0	0	1	0	3
Black-and-white Warbler	0	0	1	0	0	0	0	0	1	2	4
Nashville Warbler	0	3	0	0	0	0	0	0	1	0	4
Mourning Warbler	0	0	0	0	0	1	1	0	0	0	2
Common Yellowthroat	0	8	4	3	3	1	4	1	4	9	37
Yellow Warbler	0	21	5	16	4	3	9	5	5	5	73
Chestnut-sided Warbler	0	4	6	17	4	1	14	4	24	15	89
Yellow-rumped Warbler	0	2	1	1	0	0	0	0	0	0	4
Scarlet Tanager	0	0	0	0	0	0	0	0	1	0	1
Northern Cardinal	0	0	0	0	0	0	0	0	0	2	2
Rose-breasted Grosbeak	0	1	1	0	0	0	0	0	0	1	3
Indigo Bunting	0	0	4	3	2	4	5	2	4	10	34
Total Birds	**152**	**154**	**157**	**191**	**116**	**155**	**245**	**91**	**240**	**259**	**1,760**
Total Species	**17**	**24**	**29**	**23**	**16**	**22**	**27**	**14**	**32**	**25**	**62**

APPENDIX

D Incidental Bird Species Observed

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Appendix D Incidental Bird Species Observed during the Breeding Bird Survey at Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Common Name	Number >100 m or Flyover	Incidental Detections
Canada Goose	108	14
Wood Duck	12	1
Mallard	12	5
Wild Turkey	36	0
Rock Pigeon	40	0
Mourning Dove	6	0
Yellow-billed Cuckoo	1	0
[redacted]		
Killdeer	18	0
Ring-billed Gull	9	0
[redacted]		
Double-crested Cormorant	4	0
Turkey Vulture	36	0
[redacted]		
[redacted]		
[redacted]		
Broad-winged Hawk	3	2
Red-tailed Hawk	2	1
Great Horned Owl	1	0
Belted Kingfisher	1	0
Yellow-bellied Sapsucker	5	0
Downy Woodpecker	8	1
Hairy Woodpecker	10	0
Northern Flicker	69	2
Pileated Woodpecker	19	0
American Kestrel	10	0
Alder Flycatcher	82	0
Eastern Phoebe	12	0
Great Crested Flycatcher	2	0
Eastern Kingbird	8	0
Yellow-throated Vireo	1	0
Blue-headed Vireo	1	0
Warbling Vireo	3	0
Red-eyed Vireo	365	0
Blue Jay	229	1
American Crow	1467	9
Common Raven	38	0
Black-capped Chickadee	137	0
Tree Swallow	25	0
Barn Swallow	87	0

Appendix D Incidental Bird Species Observed during the Breeding Bird Survey at Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Common Name	Number >100 m or Flyover	Incidental Detections
Ruby-crowned Kinglet	2	0
Red-breasted Nuthatch	3	0
White-breasted Nuthatch	10	0
Brown Creeper	0	1
Blue-gray Gnatcatcher	1	0
House Wren	1	0
Winter Wren	4	0
[redacted]		
European Starling	453	0
Gray Catbird	25	0
Brown Thrasher	10	0
Northern Mockingbird	3	0
Eastern Bluebird	5	0
Veery	26	0
Hermit Thrush	17	0
Wood Thrush	11	0
American Robin	287	0
Cedar Waxwing	28	0
American Pipit	9	20
House Finch	1	0
Purple Finch	9	0
Red Crossbill	10	0
American Goldfinch	116	0
Chipping Sparrow	40	0
Dark-eyed Junco	2	0
White-throated Sparrow	97	7
[redacted]		
Savannah Sparrow	222	33
Song Sparrow	805	0
[redacted]		
Eastern Towhee	3	0
Bobolink	71	0
Eastern Meadowlark	26	0
Baltimore Oriole	2	0
Red-winged Blackbird	253	0
Brown-headed Cowbird	1	0
Common Grackle	76	0
Ovenbird	187	1
Black-and-white Warbler	37	1
Tennessee Warbler	2	0

Appendix D Incidental Bird Species Observed during the Breeding Bird Survey at Chateaugay Wind Repowering Project, Franklin County, New York, May to July 2024

Common Name	Number >100 m or Flyover	Incidental Detections
Mourning Warbler	38	0
Common Yellowthroat	242	0
American Redstart	1	0
Cape May Warbler	1	0
Yellow Warbler	234	0
Chestnut-sided Warbler	425	0
Blackpoll Warbler	1	0
Yellow-rumped Warbler	10	0
Black-throated Green Warbler	2	0
Scarlet Tanager	1	0
Northern Cardinal	15	0
Rose-breasted Grosbeak	26	0
Indigo Bunting	128	0
Total Observations	**6,863**	**106**
Number of Species	**91**	**19**

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APPENDIX

E Photo Log

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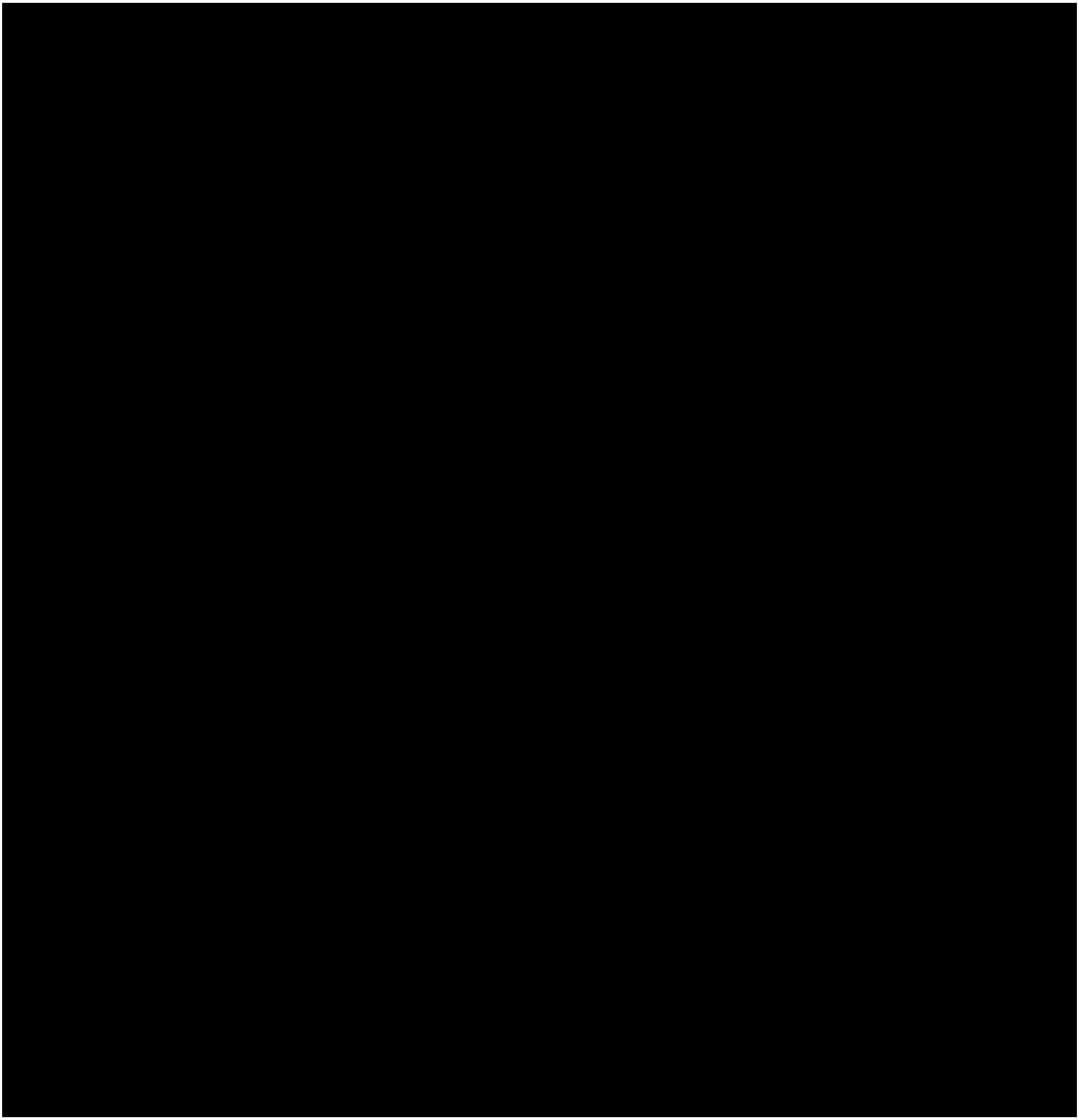
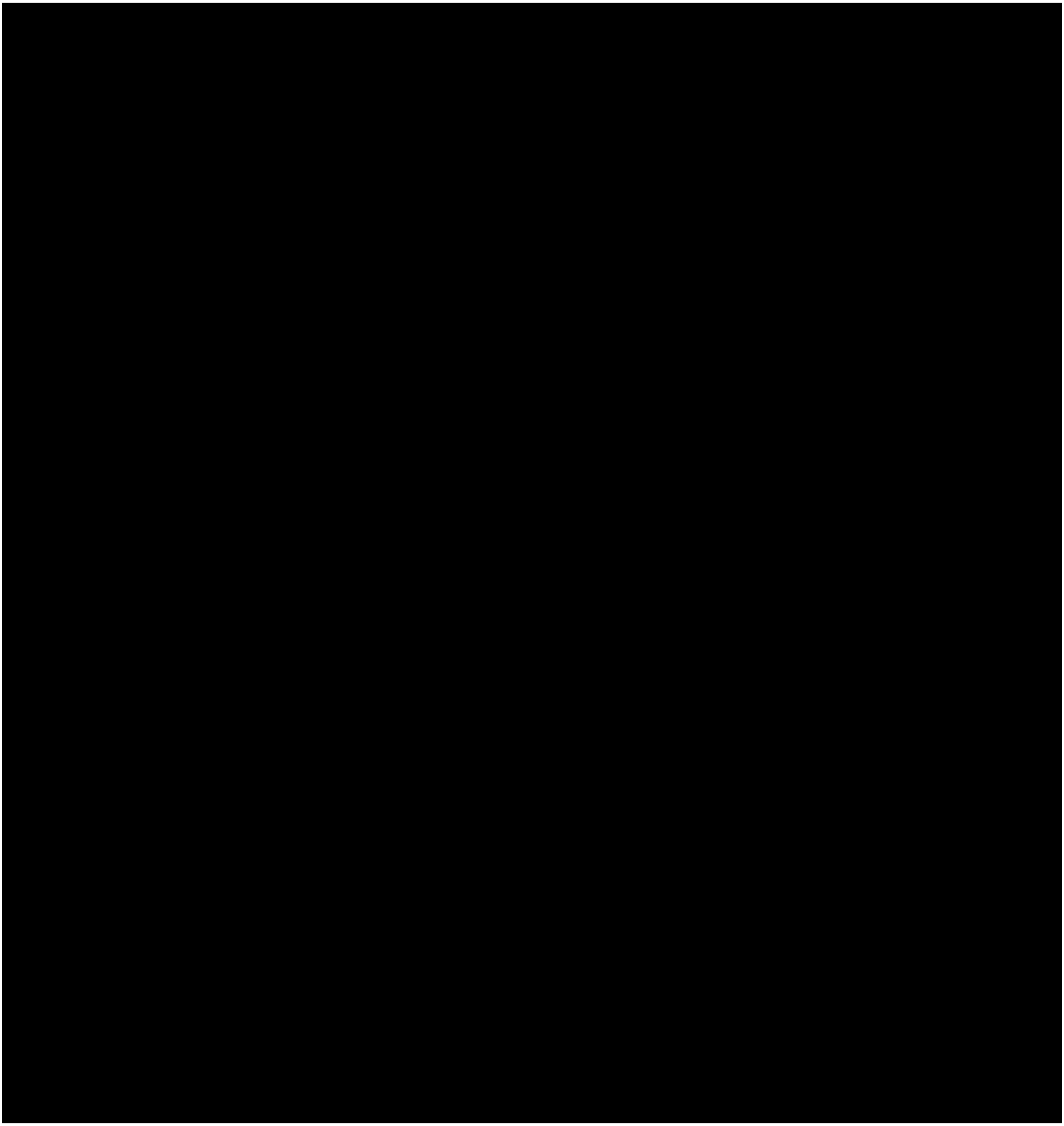
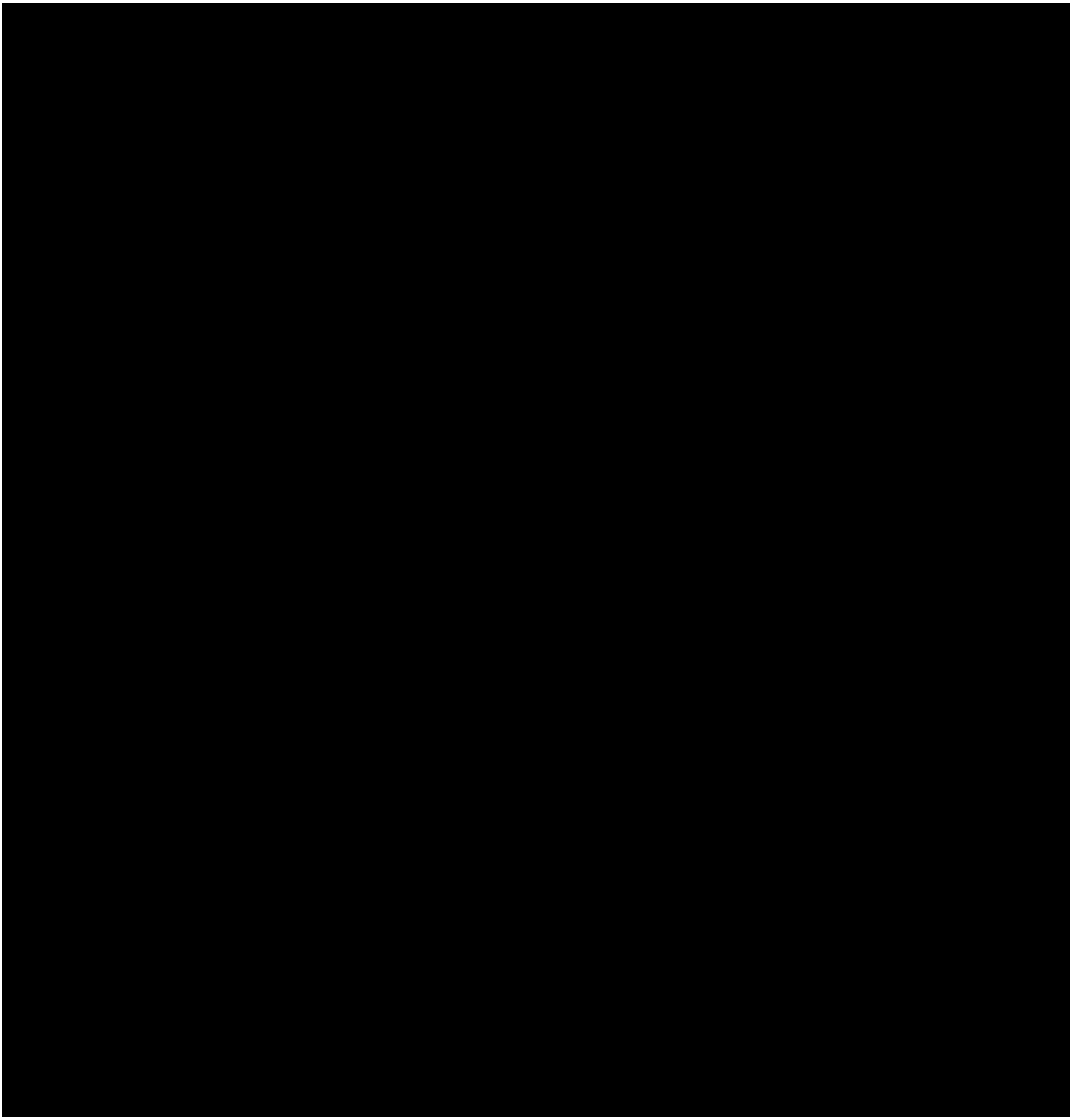
E. Photo Log

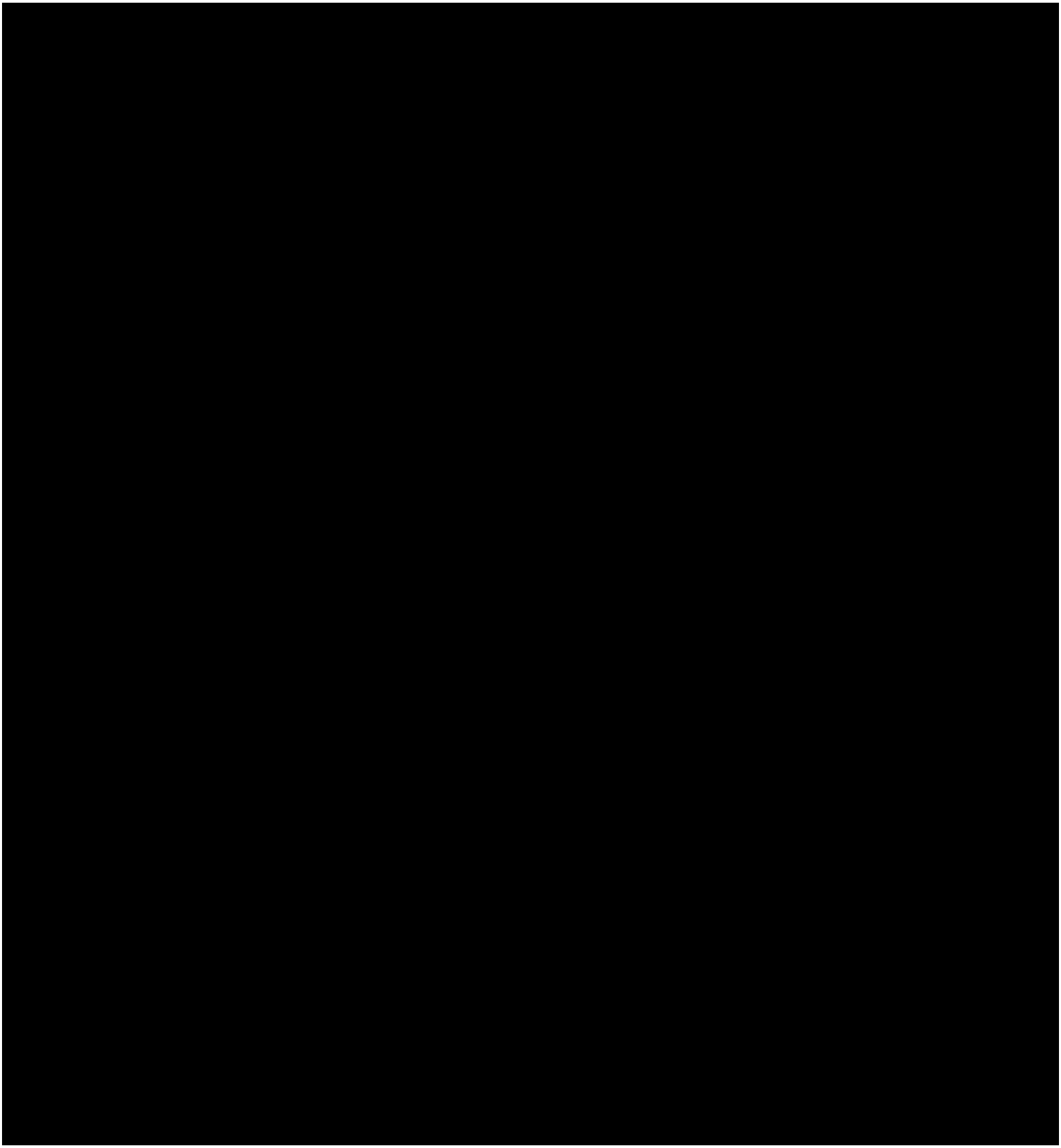


E. Photo Log

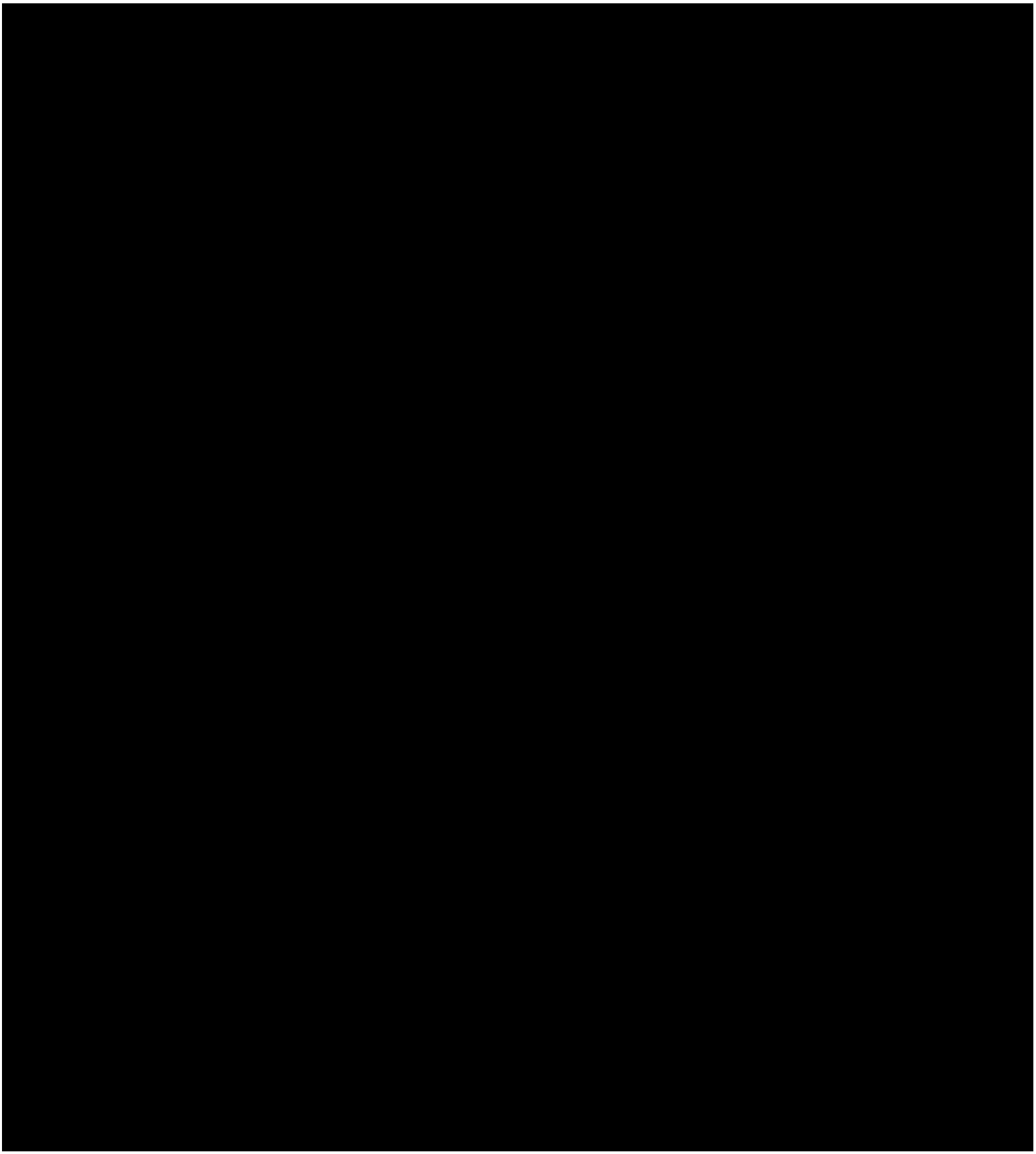


E. Photo Log





E. Photo Log



APPENDIX

F Weather Conditions

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Appendix F Breeding Bird Survey and Marsh Bird Survey Weather Summary, Chateaugay Wind Repowering Project, Franklin County, New York, April to July 2024

Survey Period	Date	Temperature (degrees Fahrenheit)		Prevailing Wind Direction	Wind Speed (mph)		Cloud Cover	Precipitation
		Low	High		Min	Max	(%)	(Y/N)
Day Prior	4/30/2024	48	51	NNW	0	12	100	Y
1	5/1/2024	43	47	SW	0	2	100	N
1	5/2/2024	51	56	W	0	10	50	N
1	5/3/2024	47	53	E	0	5	100	N
Day Prior	5/6/2024	50	57	SE	0	10	100	Y
2	5/7/2024	45	56	W	0	6	0	N
2	5/8/2024	50	52	ESE	6	8	>75	Y
2	5/9/2024	42	52	NNW	0	7	>75	N
Day Prior	5/13/2024	45	56	SE	0	13	≤75	N
3	5/14/2024	56	60	SW	0	10	100	Y
Day Prior	5/15/2024	57	59	N	0	10	100	N
3	5/16/2024	58	60	E	0	10	≤50	N
3	5/17/2024	54	65	SSW	0	6	≤50	N
Day Prior	5/20/2024	52	69	SE	0	12	≤25	N
3	5/21/2024	62	71	SW	6	8	≤25	N
3	5/22/2024	63	70	SSE	7	10	≤25	N
4	5/23/2024	64	65	WSW	10	11	≤75	N
Day Prior	5/28/2024	66	70	N	5	8	≤75	Y
4	5/29/2024	48	50	WNW	2	7	100	N
4	5/30/2024	40	55	W	0	3	≤25	N
4	5/31/2024	56	60	W	7	10	≤25	N
Day Prior	6/3/2024	52	74	SE	0	7	0	N
5	6/4/2024	60	75	SE	1	4	≤25	N
5	6/5/2024	65	65	SW	5	13	≤75	N
5	6/6/2024	67	72	SE	3	7	100	Y
5	6/7/2024	60	70	SW	0	10	≤25	N
5	6/8/2024	52	56	WSW	8	18	100	N
Day Prior	6/10/2024	59	61	W	0	10	100	N
6	6/11/2024	50	50	NE	0	2	100	N
6	6/12/2024	49	52	SSE	0	4	≤50	N
6	6/13/2024	51	64	S	0	3	≤25	N
6	6/14/2024	63	63	WSW	4	8	100	N
Day Prior	6/16/2024	52	74	SE	0	7	0	N
7	6/17/2024	68	74	SSW	6	8	100	N
7	6/18/2024	68	70	SSW	0	3	25	N
7	6/19/2024	79	84	SW	9	13	≤25	N

Appendix F Breeding Bird Survey and Marsh Bird Survey Weather Summary, Chateaugay Wind Repowering Project, Franklin County, New York, April to July 2024

Survey Period	Date	Temperature (degrees Fahrenheit)		Prevailing Wind Direction	Wind Speed (mph)		Cloud Cover	Precipitation
		Low	High		Min	Max	(%)	(Y/N)
7	6/20/2024	77	81	SW	4	10	≤75	N
7	6/21/2024	62	64	E	0	5	100	N
Day Prior	6/24/2024	62	68	NNW	0	17	100	Y
8	6/25/2024	60	70	SW	5	13	0	N
8	6/26/2024	65	72	WSW	5	15	100	N
8	6/27/2024	58	63	WNW	7	10	100	Y
8	6/28/2024	60	65	W	3	10	0	N
Day Prior	7/1/2024	60	72	NW	5	13	≤50	N
9	7/2/2024	63	71	WSW	2	6	0	N
9	7/3/2024	63	68	S	7	12	≤75	N
Day Prior	7/8/2024	61	77	SSE	0	9	0	N
9	7/9/2024	66	76	SW	3	13	100	N
9	7/10/2024	73	74	S	0	7	100	Y
9	7/11/2024	65	65	E	3	5	100	N
10	7/12/2024	64	67	S	0	6	>75	N
10	7/13/2024	70	72	WSW	4	7	≤25	N
Day Prior	7/15/2024	69	81	SE	0	10	≤50	N
10	7/16/2024	68	74	SW	5	9	<75	N
10	7/17/2024	68	72	SW	5	9	100	Y
10	7/18/2024	60	65	SW	5	8	<25	N
10	7/19/2024	54	56	SW	2	2	<25	N

Source: Wunderground.com
Notes:
Weather data for prior days representative of survey hours (5:00 a.m.to 10:30 a.m.) weather data from Plattsburgh International Airport Station, Plattsburgh, New York.
Weather data for survey days collected in the field.