Continuing Education Units | CEU's

To verify your attendance at this session **Scan in** at the BEGINNING and **Scan out** at the END

For your PRINTED CERTIFICATE OF ATTENDANCE, follow the directions found in the "CEU Procedures" section of the printed Conference Program Book

Other questions, please consult the *League Staff at the Information Booth on Level 2*

Panel Speakers

Jaclyn Veasy

Tanya Rohrbach

Christopher Cosenza

Christopher Obropta

William Love

Statistics

2009
Program
Started

83%
Participating

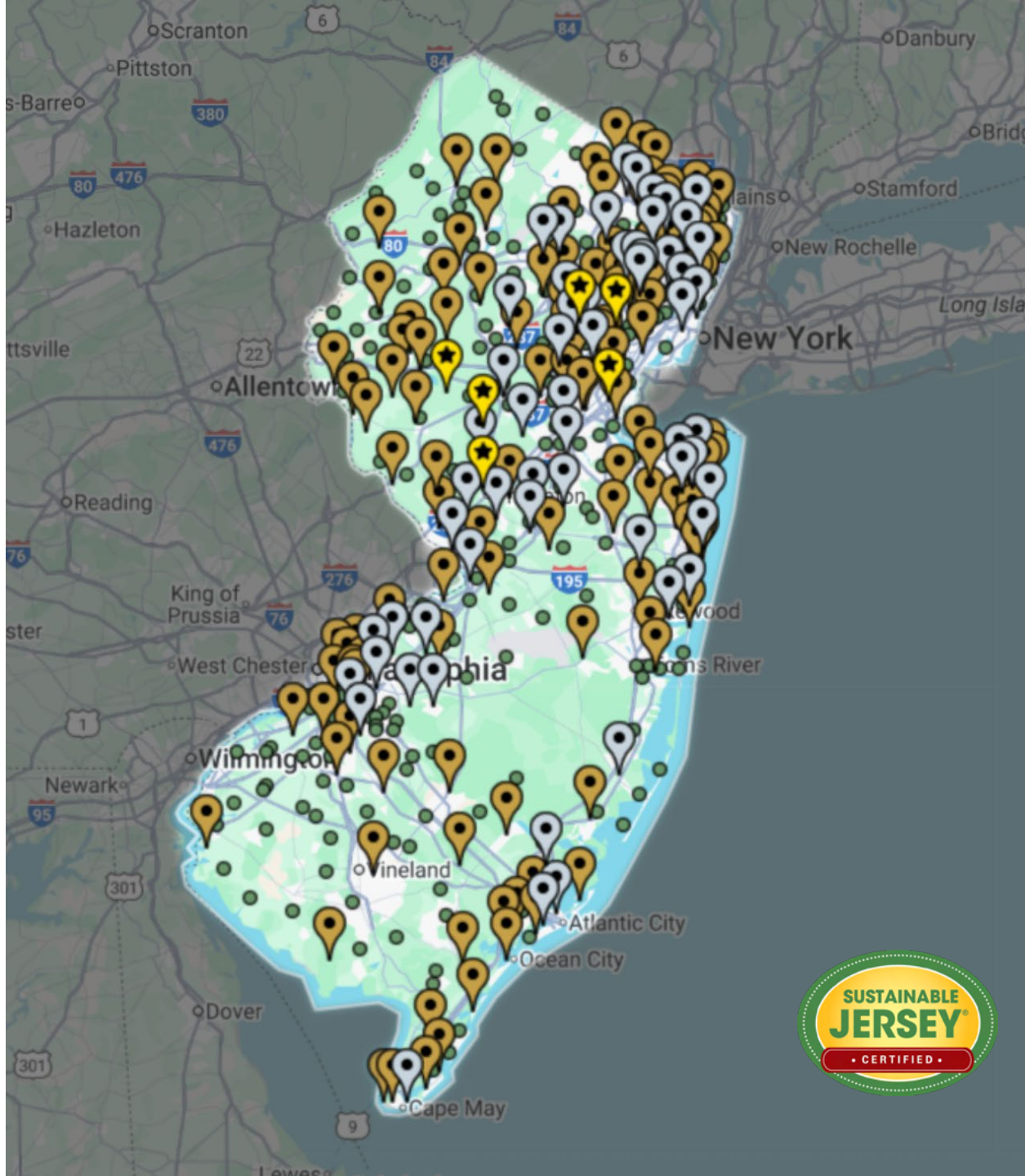
91%
Population

126
Bronze
Certified

65
Silver
Certified

6 Stars

19,637
Actions
Implemented



SUSTAINABLE JERSEY GRANTS PROGRAM

PSEG FOUNDATION

njea NEW JERSEY EDUCATION ASSOCIATION

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PSEG FOUNDATION

*Municipalities only

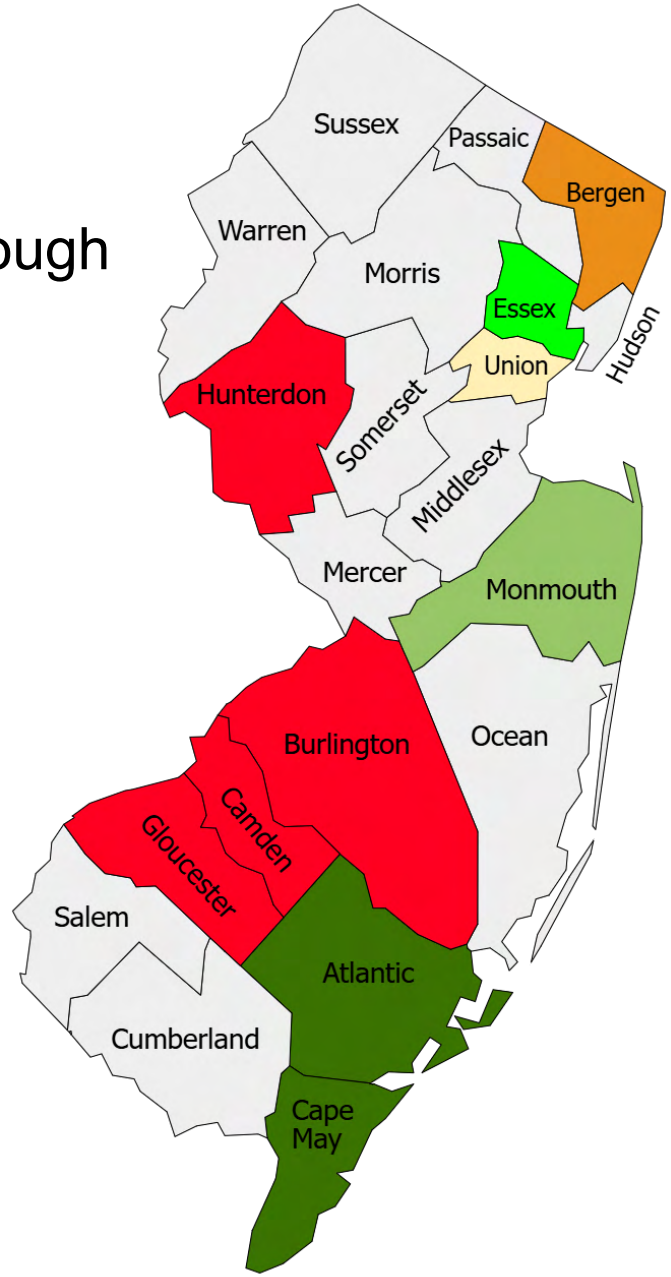
ELIGIBILITY	Municipalities	Public Schools
APPLICATION DEADLINE	Friday 2/13/26 11:59pm	Friday 3/9/26 11:59pm
Apply Now		

Regional Hubs

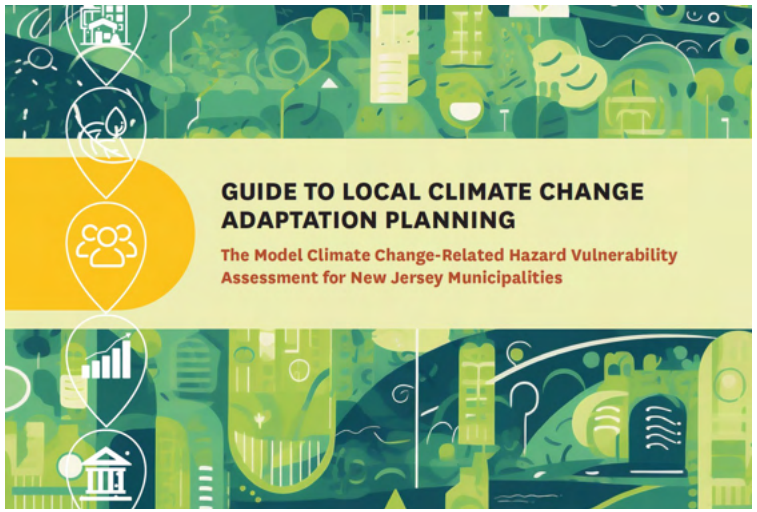
Ten hubs around the state to help green teams build capacity through training, best practices resources and networking. Learn more sustainablejersey.com/get-involved/

Benefits

- Peer mentoring
- Project collaboration
- Online communication platform
- Network of Leaders
- Quarterly Events
- Help Peers Get Certified
- Technical assistance & administrative support from SJ



Climate Readiness Program



BEST PRACTICE RESOURCE

Guide to Local Climate Change Adaptation Planning

NEW ACTION

Comprehensive Climate Change-Related Hazard Vulnerability Assessment

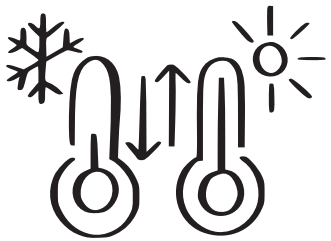
NO COST TECHNICAL ASSISTANCE

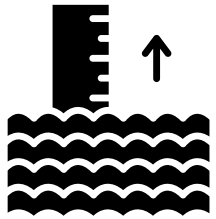
Municipal Climate Vulnerability Assessment

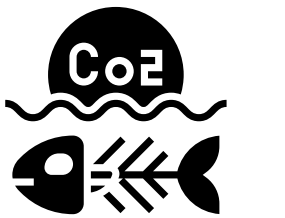
Gold Star in Climate Readiness

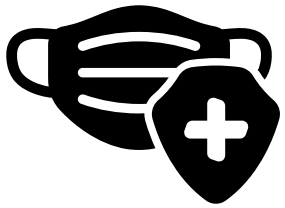
- **NEW!**
- Signifies High levels of achievement in key dimensions of sustainability.
- The award of a Gold Star indicates that a municipality is making an effective, fair and timely contribution to the collective achievement of our sustainability goals.
- Based on the Comprehensive Climate Change Related Hazard Vulnerability Assessment Action

A CCRHVA is an analysis of climate hazard impact…









Climate Hazards

- Extreme Temperature
- Drought
- Flooding
- Severe Weather
- Saltwater Intrusion
- Ocean Acidification
- Mudslides/Landslides
- Wildfire
- Disease
- Pests

…Across all the systems that support the municipality.

SYSTEM	BUILT SYSTEM	NATURAL SYSTEM	SOCIAL SYSTEM	ECONOMIC SYSTEM	GOVERNANCE SYSTEM
FEATURE	• Facilities & Infrastructure • Housing Stock & Businesses	• Natural Lands Resources • Water Source Resources • Air Quality	• People	• Sustainable Economic Development • Working Lands • Outdoor Recreation	• Equitable Land Use • Community Engagement • Jurisdictional Plans & Accountability

Take Action

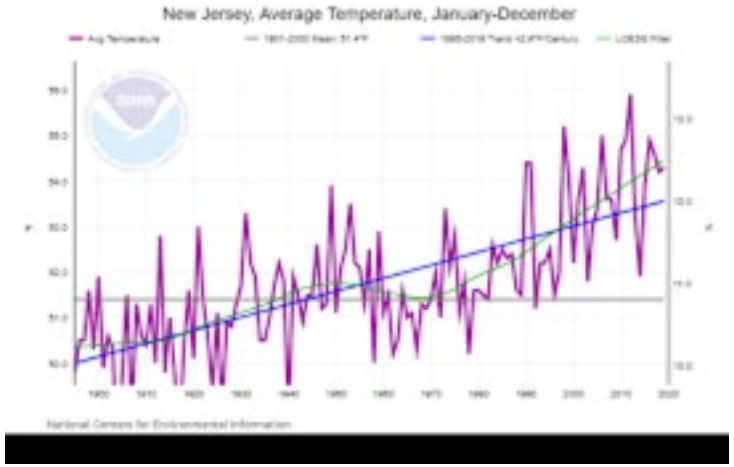
- **Reduce Vulnerabilities Identified in the CCRHVA**
- **Holistic**
- **Comprehensive**
- **Flexible**

GOLD STAR IN CLIMATE READINESS

Actions to ↓ Vulnerability & ↑ Adaptive Capacity

Built System Examples

GOLD STAR



Heat Island Assessment & Mitigation Plan Action

Green Infrastructure Planning & Implementation Actions

Green Development Checklist Action

Actions to ↓ Vulnerability & ↑ Adaptive Capacity

Natural System Examples

GOLD STAR

Community Forestry Management Plan and NJUCF Accreditation Action

Open Space Plan Action

Water Use and Conservation Education Action

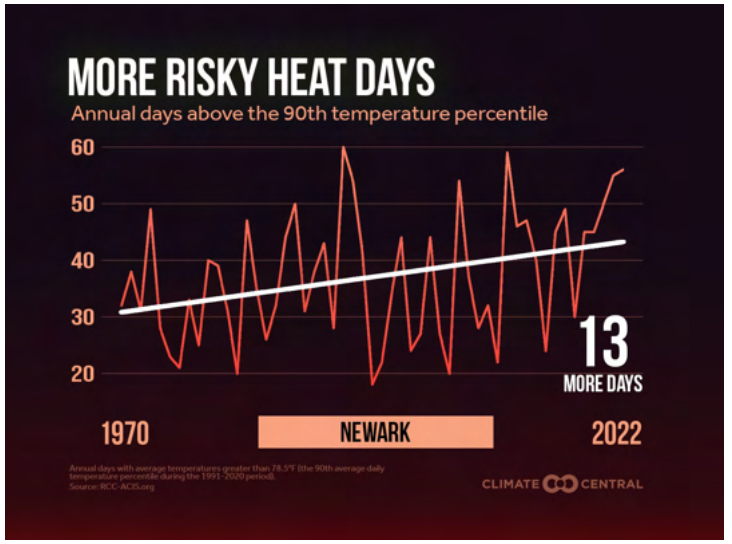
Actions to ↓ Vulnerability & ↑ Adaptive Capacity

Governance System Examples

GOLD STAR

Enhanced Stormwater Management Control Ordinance Action

Community Wildfire Protection Plan Action



Extreme Temperature Event Plan Action

Sustainable Jersey Sessions - New Jersey League of Municipalities

PLANNING & FUNDING for FLEET ELECTRIFICATION
Tuesday, 11/18, 2:00pm – 3:15pm, Room 420

SMALL GRANTS, BIG IMPACT:
SUSTAINABLE JERSEY SUCCESS STORIES
Tuesday, 11/18, 3:45pm – 5:00pm, Room 421

SUSTAINBLE JERSEY: NEW ACTIONS &
COST-SAVING INITIATIVES
Wednesday, 11/19, 9:00am – 10:15am, Room 421

21st CENTURY ENERGY UPDATES: INCENTIVES FOR
MUNICIPAL FACILITIES
Wednesday, 11/19, 10:45am – 12:00pm, Room 420

ZERO IS POSSIBLE:
ADVANCING COMPLETE STREET INITIATIVES
Wednesday, 11/19, 2:00pm – 3:15pm, Room 420

POWERING COMMUNITIES: NEW STRATEGIES TO LOWER
ENERGY COSTS
Wednesday, 11/19, 3:45pm – 5:00pm, Room 421

CLIMATE READINESS NOW: MUNICIPAL ACTION FOR
HAZARD RESILIENCE
Thursday, 11/20, 9:00am – 10:15am, Room 421

FEEDING COMMUNITIES: LOCAL FOOD SECURITY
SUCCESSES
Thursday, 11/20, 10:45am – 12:00pm, Room 420

COST-EFFECTIVE GREEN PURCHASING FOR
MUNICIPALITIES
Thursday, 11/20, 2:00pm – 3:15pm, Room 420

Sustainable Jersey Underwriters and Sponsors

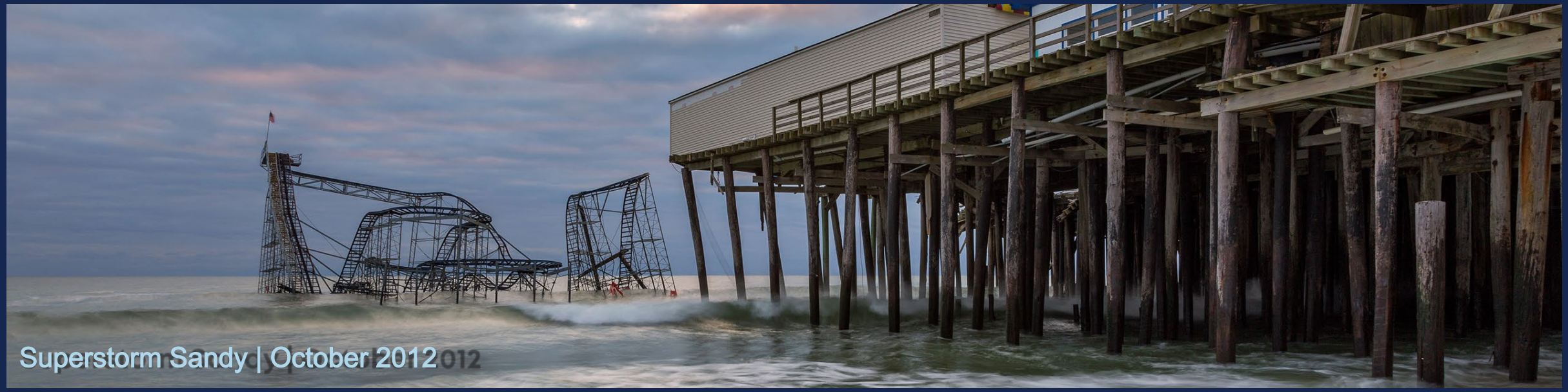
Program Underwriters

Corporate Sponsors

Building a Climate -Ready Metuchen

local leadership for resilience and climate adaptation

Source: Money.com/collection -post/Metuchen -new -jersey/



Source: NJDEP

Source: AP Photo / Jim Gerberich

Source: Thomas Enters

Why This Matters

- Climate change does not discriminate
- Impacts all communities in different ways
- Local leadership matters more than ever
- Proactive municipal climate adaptation planning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Mayor Jonathan M. Busch's Post

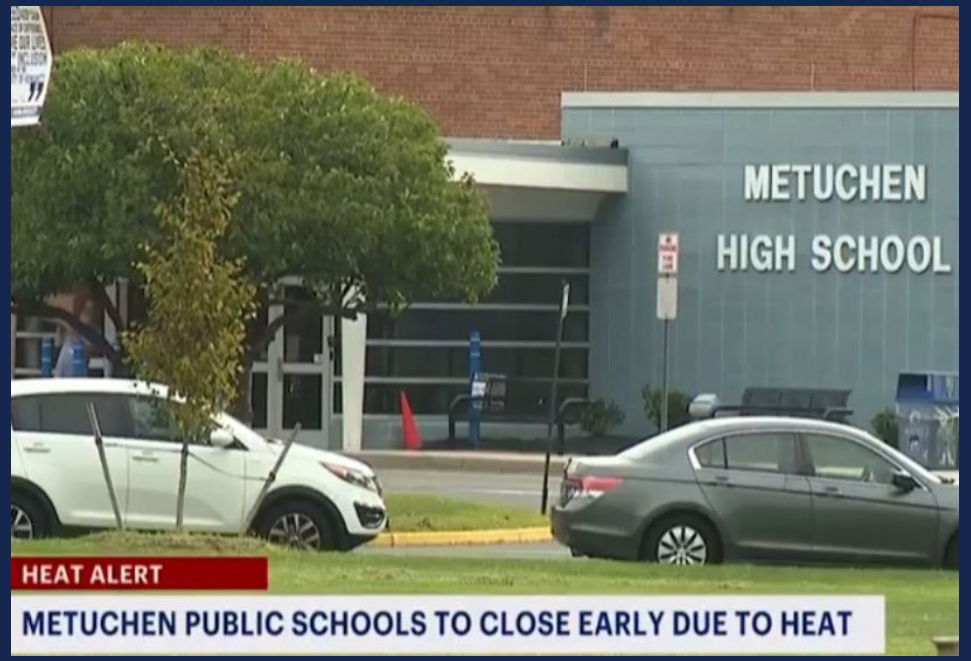
Mayor Jonathan M. Busch is in Metuchen, NJ.
June 21 ·

An Extreme Heat Warning is in effect for our area from Sunday through Wednesday, with the most dangerous conditions expected Monday and Tuesday. Highs near 100° and heat indices up to 110°, with little relief overnight, make this more than just uncomfortable—it's dangerous.

Please stay hydrated, make sure to limit time outdoors (for your children and pets too), and make sure to check in on your neighbors, especially those who may be elderly or without air conditioning. Should you need an air conditioning break, feel free to come to Borough Hall or use the Police Department vestibule.

We are working closely with our Office of Emergency Management and the Metuchen School District for contingency plans in the event of a power outage.

We will provide additional updates should they become necessary.



Proactive Municipal Planning

- Beyond Model Ordinances
  - Collaborate / Advocate for Climate-Resilient Land Use Decisions
  - Strengthen Development & Design Standards (for Subdivisions & Site Plans)
  - Adopt “Minor Development” Regulations (for 1- and 2-Family Dwellings)
  - Adopt Optional / Enhanced Ordinances
- Master Plan Update
  - Reexamination + Update to Land Use Plan Element (including CCRHVA)
  - Integrate Meaningful Community Engagement


WOODMONT METRO
AT METUCHEN STATION

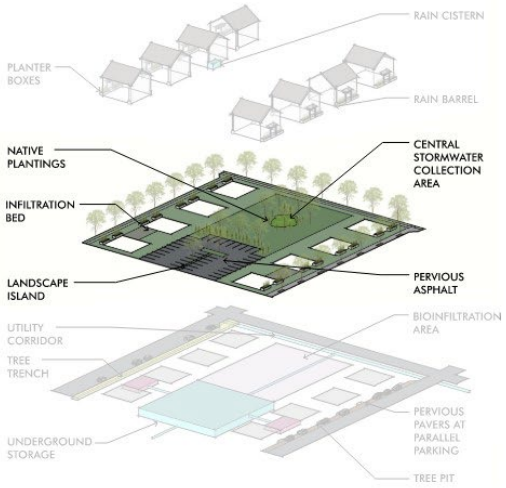

WHOLE FOODS MARKET

- Advocate for Green Infrastructure in projects large and small
  - Underground detention
  - Permeable paving
  - Porous pavement
  - Rain barrels
  - Rain cisterns
  - Rain gardens
- Celebrate all of the little wins

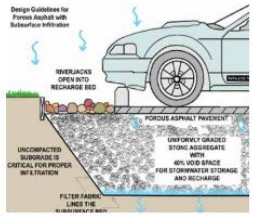
Evesham Township Downtown Vision Plan

Fair Lawn Radburn Planning Design Guidelines

GREEN INFRASTRUCTURE IN YARD AREAS & PUBLIC SPACES



Pervious Asphalt

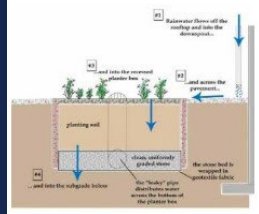


Pervious asphalt allows for localized infiltration and limits stormwater runoff

Landscape Islands

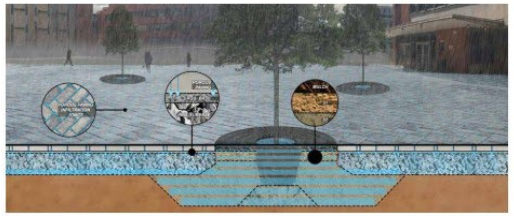
Landscape islands can capture runoff from parking lots and other areas with non-pervious paving

Planter Boxes



Planter boxes help delay and limit stormwater runoff

Infiltration Beds



Pervious paving allows for local stormwater infiltration, which limits runoff

Underground storage can be added to increase capacity and capture runoff from adjacent buildings

STORMWATER STRATEGIES

Rain Barrels and Cisterns

Rain barrels, fed by downspouts from houses and buildings, can capture water which can be then used for watering of site plantings. Stormwater can run off and the demand for potable water for irrigation are both reduced through this approach.

Green Roofs

Provide a means of capturing stormwater from a flat or sloping roof surface. Green roofs can be made as small as a door overhang or as large as an entire roof. They can also be simple, shallow planting media using sedums (extensive green roofs), or they can include deeper soils and more elaborate plantings (intensive green roofs) to create public spaces or improve viewsheds.

Stormwater Planter Boxes

Stormwater planter boxes enhance building frontages and landscape areas and can capture and use stormwater runoff for irrigation. Downspouts can feed directly into planter boxes which can be designed to infiltrate runoff or simply to delay runoff release to the storm sewer.

Infiltration Beds

The use of pervious paving techniques such as pervious asphalt, concrete, and pavers allows stormwater that falls on these surfaces to infiltrate and recharge the groundwater at that location, or be stored for slow-release. Underground storage capacity can be increased to receive adjacent buildings. With or without porous paving, stormwater storage and infiltration/slow release beds can be included beneath patios, terraces and walks to capture localized stormwater runoff.

PARKING LOTS PRECEDENTS

Existing Conditions: A parking lot off of Fair Lawn Avenue and Abbot Road lacks visual screening from the street.

Possible Intervention: A metal fence with plantings beyond is used to screen a parking entrance. (Metuchen, NJ)

PRECEDENTS PARKING LOTS

Existing Conditions: The parking lot on Warren Road is insufficiently and inappropriately screened from view.

Possible Intervention: Robust plantings and a low masonry wall screen a parking lot from view. (Metuchen, NJ)

GREEN INFRASTRUCTURE GUIDELINES

FLOW-THROUGH PLANTERS

Hard-edged, impermeable base planters allow runoff to soak through its soil and filter to an underdrain system that carries runoff to a downstream discharge system.

The engineered soil mixture should consist of 5 percent maximum clay content and 10 percent organic matter by weight.

Planters should be designed to drain within 24 hours and should not be located in constrained areas next to buildings, areas with limited setbacks, poorly drained soils, steep slopes, or areas with contaminated slopes.

RAIN GARDENS

Planted depressions or holes that allow rainwater runoff from impervious surfaces to be absorbed requires an area where such water can collect and infiltrate.

The soil mixture should contain 60 percent sand and 40 percent compost (Washington State University Studies).

Native plants with deep and variable root systems should be used to enhance water filtration.

PERVIOUS STRIPS

Subject to a higher maintenance cycle due to potential clogging or permeable and gravel voids, pervious strips are an inexpensive step to capture and slow runoff.

Use native plants where possible to minimize irrigation requirements, for greater chances at survival, and to help generate less runoff.

Design the volume and flow capacity based on the contributing watershed area and design storm runoff.

A maximum of 2 percent slope should be used.

Install waterproof liners as separation barriers or construct a deep curb to separate the roadbed sub-grade or parallel utility line from the facility.

Consider integrating long, linear spaces with urban agriculture programs.

PERMEABLE PAVEMENT

Permeable paving materials should be used where appropriate to allow stormwater runoff to infiltrate through the material into the ground instead of into the storm drain systems.

Most porous paving should be laid on top of an infiltration bed and sub-grade soil. An underdrain system can be used to convey any remaining runoff to the municipal sewer system.

Paving selection, such as permeable pavers, permeable concrete, or permeable asphalt, should be based on engineering constraints and the surrounding street context.

Permeable pavement requires frequent maintenance and upkeep to remain effective over its lifespan.

Before installation, a geotechnical evaluation should occur to determine appropriate permeability, height of the water table, depth to bedrock, and any soil contamination.

For cold weather months, salt should be applied in moderation to reduce contamination of the subsoil. Plowing should be done carefully and abrasives (i.e., sand) should be avoided to preserve the integrity of the system.

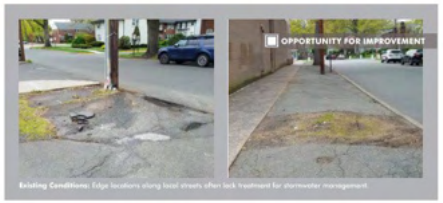
OTHER POTENTIAL STRATEGIES

Rain barrels, fed by downspouts from buildings, can capture water which can be then used for watering of site plantings. Stormwater can run off and the demand for potable water for irrigation are both reduced through this approach.

Green roofs provide a means of capturing stormwater from a flat or sloping roof surface. They can be made as small as a door overhang or as large as an entire roof. They can also be simple, shallow planting media using sedums (extensive green roofs), or they can include deeper soils and more elaborate plantings (intensive green roofs) to create public spaces or improve viewsheds.

Tree pits & trenches are planted green strips at the street edge that can be constructed to collect street and sidewalk runoff. Installation of tree trenches and tree pits requires modifications to existing stormwater infrastructure (and thus excavation of sidewalk), and is best used in areas where sidewalk replacement is being proposed. Tree Trenches manage runoff from both the sidewalk and the street.

PRECEDENTS GREEN INFRASTRUCTURE



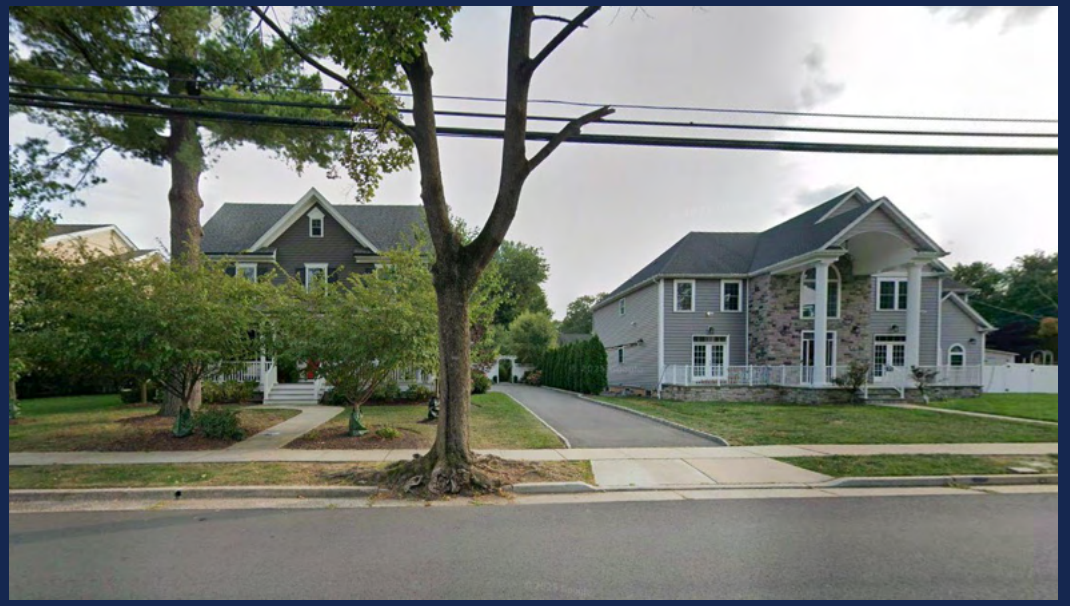
Existing Conditions: Edge locations along local streets often lack treatment for stormwater management.

Possible Intervention: Rain garden using native plants and permeable materials integrated into cafe seating area.

Permeable paving in a parking lot.

Pervious strip along road edge.


Hillside Ave



M. Foundation Plantings

(1) The base along the front of the dwelling and porch facing a street shall be planted with foundation plantings consisting of deciduous and/or evergreen shrubs.

(2) In the case of a corner or through lot, the base along all sides of the dwelling facing both streets shall be planted with foundation plantings.

(3) The base along the side(s) of the dwelling facing a side lot line shall be planted with foundation plantings consisting of deciduous and/or evergreen shrubs, with the following exceptions:

a. The portion of the side yard having a side yard setback that is less than eight (8) feet in width.

b. The portion of the side yard where a permitted driveway, walkways, or patios abutting the side of the dwelling.

c. The portion of the side yard behind a permitted fence or wall abutting the side of the dwelling.

(4) Such plantings shall be no less than two (2) feet tall at the time of planting, and spaced on average of four (4) feet on center.

(5) A variety of species is required to avoid a monoculture, as follows:

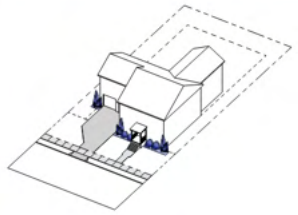
a. In the case where 10 or more foundation plantings are provided, no more than one-half (1/2) shall be of any single species.

b. In the case where 15 or more foundation plantings are provided, no more than one-third (1/3) shall be of any single species.

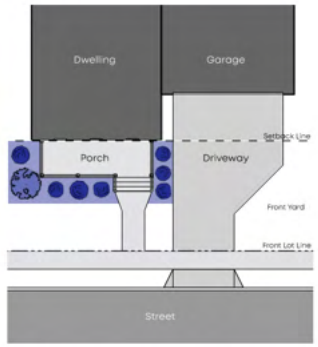
c. In the case where 20 or more foundation plantings are provided, no more than one-quarter (1/4) shall be of any single species.

d. The selection of species shall comply with the Borough's "Do Not Plant" list.

Mid-Block Lot Condition - Axon View



Mid-Block Lot Condition - Axon View



Note: Foundation plantings do not need to be directly adjacent to the dwelling. In order to prevent excess moisture build up and to discourage insects and pests from entering the dwelling, it is recommended that foundation plantings are spaced in such a manner that they do not come into contact with the dwelling at full maturity.

N. Front Yard Shade & Flowering Trees

(1) The front yard of the dwelling shall be planted with the following number of shade and flowering trees for each 50 feet of lot width, (A) or part thereof:

Front Yard Setback (B)	Shade Trees	Flowering Trees
Less than 10'	0	0
10' to less than 50'	1	1
50' or greater	2	2

(2) In the case of a corner or through lot, both front yards shall be planted with shade and flowering trees. Where front yards overlap at a street intersection, such portion of the front yard shall only be counted once for the purposes of calculating the required number of trees.

(3) In the case where healthy shade and/or flowering trees in the front yard currently exist and are proposed to be preserved, such trees shall be counted toward satisfying the required number of trees.

(4) Each shade tree shall be a minimum of two-and-one-half (2 ½) inches in DPM and each flowering tree shall be a minimum of two (2) inches in DPM at time of planting.

(5) A variety of species is required to avoid a monoculture, as follows:

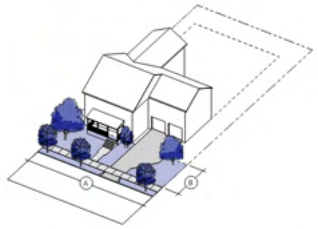
a. In the case where four (4) or more shade trees are provided, no more than one-half (1/2) shall be of any single species.

b. In the case where four (4) or more flowering trees are provided, no more than one-half (1/2) shall be of any single species.

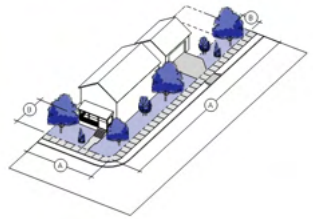
(6) The selection of species shall comply with the Borough's "Do Not Plant" list, latest edition.

(7) Each shade tree shall constitute 1.0 replacement tree and each flowering tree shall constitute 0.75 replacement trees, for the purposes of counting replacement trees as provided by **Chapter 388. Tree Removal and Protection**.

Mid-Block Lot Condition - Axon View



Corner Lot Condition - Axon View



O. Street Trees

(1) Street trees shall be provided at intervals of approximately 25 to 40 feet along each side of all streets in consultation with the Shade Tree Advisory Committee. (A)

(2) Where public sidewalks are present, street trees shall be located as follows:

a. Street trees shall be planted in a planting strip that is at least five (5) feet in width and set back at least three (3) feet from face of curb or edge of paved street.

b. Street trees may be located in a planting strip less than five (5) feet in width only at direction of the Shade Tree Advisory Committee; otherwise, they shall be planted three (3) to six (6) feet from the edge of the sidewalk.

(3) Where public sidewalks are not present, street trees shall be located as follows:

a. Where sidewalks are not present, street trees shall be planted between 4 to 10 feet from the face of curb or edge of the paved street.

(4) No street tree shall be planted in a planting strip within 25 feet of the intersecting curb lines at a street intersection. (B)

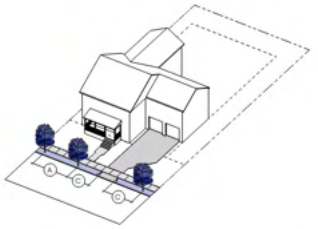
(5) No street tree shall be planted in a planting strip within 10 feet of a driveway opening. (C)

(6) Such trees shall be a minimum of two-and-one-half (2 ½) inches in DPM at the time of planting.

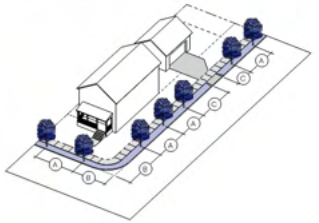
(7) The selection of species shall comply with the Borough's "Do Not Plant" list, latest edition. In the case where street trees are to be located under or adjacent to overhead utility lines, species selection shall be from PSE&G's "Right Tree, Right Place" list, latest edition, in coordination with the Shade Tree Advisory Committee.

(8) Each street tree shall constitute 1.0 replacement tree, for the purposes of counting replacement trees as provided by **Chapter 388. Tree Removal and Protection**.

Mid-Block Lot Condition - Axon View



Corner Lot Condition - Axon View



- Address Local Issues
  - Playing catch up with tree canopy loss
  - Maintaining neighborhood character
  - Not all streets have storm sewer lines
  - Sump pumps running “24/7”
  - Overwhelming overall system
  - Soil erosion at outfalls / steep slopes
  - Freeze/thaw impacting infrastructure

Beyond Model Ordinances

- Planting Requirements / Diversity Requirements
  - Foundation Plantings; Front Yard Shade & Flowering Trees; Street Trees
  - Diversity Requirements
- “Minor Development” Lot Grading and Drainage Requirements
  - Minimum 2’ Separation from SHWT
  - Maximum 4’ Separation from Preconstruction / Finish Grade
  - Permeable Paving, Porous Pavement, Drywell Systems for New Homes / Additions
- More Aggressive Tree Removal & Replacement Requirements

CLIMATE READY METUCHEN

OUR COMMUNITY IS PREPARING FOR CLIMATE CHANGE WITH A CLIMATE VULNERABILITY ASSESSMENT TO ENSURE:

- *Fewer disruptions from storms and flooding*
- *Safer public spaces and buildings*
- *Smarter infrastructure investments*
- *More stable economy and property values*
- *A stronger, more connected community*

LEARN MORE

Visit bit.ly/ClimateReadyMetuchen to learn more.

CLIMATE VULNERABILITY ASSESSMENT PROCESS:

How is the climate changing?
DATA COLLECTION
- Identify climate hazards, development patterns, and system features

How are we vulnerable?
ANALYSIS
- Analyze and characterize the vulnerability of the features and systems supporting the community

What can we do?
RECOMMENDATIONS
- Identify strategies and design standards
- Create the plan of action
- Update and sustain climate readiness

Community and Stakeholder Input

THE VALUE OF TREES:

Trees combat climate change by storing carbon they pull out of the atmosphere and mitigating the effects of rising temperatures and rainfall. Trees provide shade, habitat, beauty and educational opportunities; they filter pollutants from air and water, reduce stormwater runoff, and lower carbon emissions and costs by saving energy in buildings. Did you know the average tree canopy across Metuchen Borough decreased -4.3% between 2017 and 2023? (TreeCanopy.US)

YOUR INPUT IS ESSENTIAL

Complete the online survey to share your experiences and vision for a climate ready Metuchen.

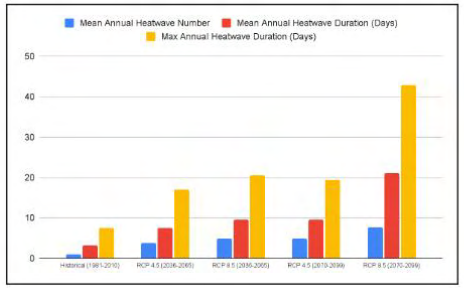
To take the survey, scan the QR code or go to:
https://bit.ly/ClimateReadyMetuchenSurvey

TAKE SURVEY

Metuchen Borough was awarded no-cost technical assistance from Sustainable Jersey to update our climate vulnerability assessment. This is a Metuchen Borough project with technical assistance provided by Sustainable Jersey. This document was prepared with financial assistance from the New Jersey Department of Environmental Protection, Resilient NJ program, with funding from the American Rescue Plan. The assessments, data, and actions in this document do not represent guidance or policy of NJDEP and does not replace the need for regulatory review by the appropriate local, state, and federal agencies.

Heatwave Analysis[5]

Dataset	Range of Annual Heatwaves Projected (# Heatwaves)	Range of Mean Annual Heatwave Duration Projected (# Days)	Range of Max Annual Heatwave Duration Projected (# Days)
Historical Mean (1981-2010)	1.1	3.2	7.6
RCP 4.5 (2036-2065)	2.9 - 6.6	5.4 - 10.8	11.5 - 23.6
RCP 8.5 (2036-2065)	3.4 - 9.5	6.9 - 15.1	13.2 - 32.2
RCP 4.5 (2070-2099)	3.3 - 9.1	6.6 - 14.8	12.8 - 27.3
RCP 8.5 (2070-2099)	5.4 - 12.7	13.6 - 38.8	20.9 - 76.0

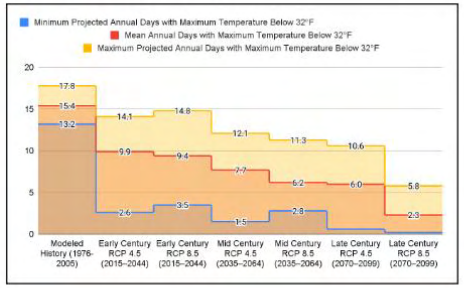


Heatwaves are projected to increase in number and duration under both low- and high-emissions scenarios. By mid century the number of heatwaves will increase from the historical rate of 1 to between 3 and 10 per year. By end century, the municipality could experience up to 13 heatwaves a year under a scenario of high emissions.

The historical maximum heatwave duration is 8 days, but by the end of the century, the municipality could experience heatwaves lasting up to 76 days under a scenario of high-emissions.

KEY CONSIDERATIONS
Heatwaves strain electrical grids, affect economies, and put the health and lives of people at risk. The municipality will need to consider ways to provide services and notifications to all members of the public during and in preparation of heatwave events, particularly reaching people experiencing social vulnerability.

Days Per Year Below Freezing[6]



The annual number of days with maximum temperature below 32°F is decreasing and will continue to decrease through the end of the century under all emissions scenarios. In the short-term, it can be expected that there will be on average approximately 5.8 fewer "freeze" days than there were historically. By end century, there are projected to be between 0.2 to 10.6 freeze days, depending on the emissions scenario, compared to between 13.2 and 17.8 days historically.

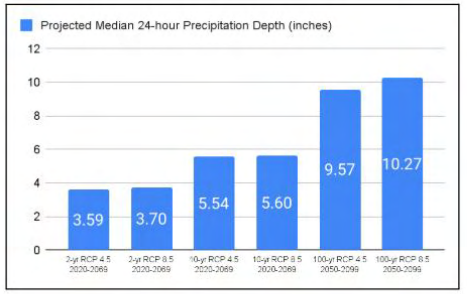
KEY CONSIDERATIONS
This trend may reduce heating costs and icing on infrastructure, but it increases the likelihood of survival and spread for vector-borne diseases and agricultural and environmental pests.

[5] NJAdapt Heatwave Analysis for Middlesex County, Accessed on 04/18/2025
[6] Climate Mapping for Resilience and Adaptation Tool, Accessed 04/18/2025

METUCHEN BOROUGH CLIMATE READINESS
CCRHVA Preliminary Data Gathering: Climate Hazards Scan

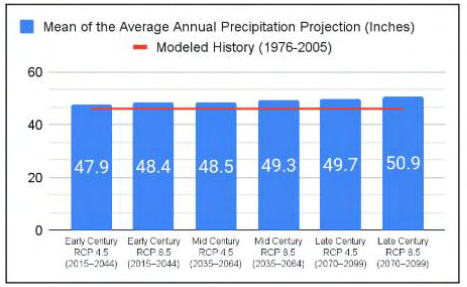
Precipitation: Increased Extreme Precipitation Events

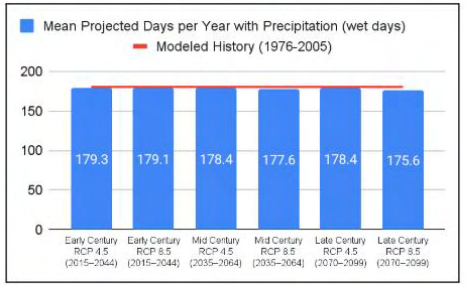
Projected Precipitation Depth Over a 24-hr period[7]



There is a 50% likelihood that the precipitation depth (inches) associated with a 24-hour storm that has a 50% chance of occurring in any given year (i.e. 2-yr storm) will exceed 3.6 inches within the next four decades. By mid-century, for a storm with a 10% chance of occurring in any given year (i.e. 10-yr storm), there is a 50% likelihood rainfall will exceed 5.5 inches in a 24-hour period. Rainfall in a 24-hour period for a storm that has a 1% chance of occurring in any given year (i.e. 100-yr storm) has a 50% likelihood of exceeding 9.6 inches by the end of the century.

Mean Annual Precipitation[6]





Annual average precipitation will increase approximately 1.8 to 4.8 inches from the historical average of 46.1 inches by mid century. Under a high-emissions scenario, average annual precipitation is projected to increase to 50.9 inches by the end of the century, which is a 9.4% increase from the historical average. However, the number of "wet days," or occurrences of precipitation events is projected to decrease.

KEY CONSIDERATIONS
Extreme precipitation events, occurring when a large amount of rain falls or snow melts in an area in a short amount of time, cause flooding and pose severe risks to people and property. Most stormwater systems are not designed to handle these types of events. Increased annual precipitation contributes to greater flooding and can interfere with transportation, travel, agriculture, and other industries and sectors. The health, safety, and welfare of people and communities are increasingly impacted by flooding events.

[7] New Jersey Extreme Precipitation Projection Tool, Accessed 04/18/2025

Welcome!

Borough of Metuchen

Master Plan
Community Meeting

This year, as required by state law, the Borough is reexamining its Master Plan and making strategic updates of the Land Use Plan Element.

To inform the Master Plan update, the Borough is hosting an open format community meeting where the public can travel to different tables to ask questions and provide feedback on special planning topics, including:

Commercial Planning Areas, Climate Resilience, Housing, Circulation, Open Space & Recreation, and Historic Preservation.

Whether you're a resident, a local business owner, a community leader, or someone who simply loves this community, **we need your input to shape the future of Metuchen!**

Where?
Edgar Middle School Gym
49 Brunswick Avenue
Metuchen, NJ 08840

When?
November 12, 2025
6:00 - 8:00 PM
Come any time!

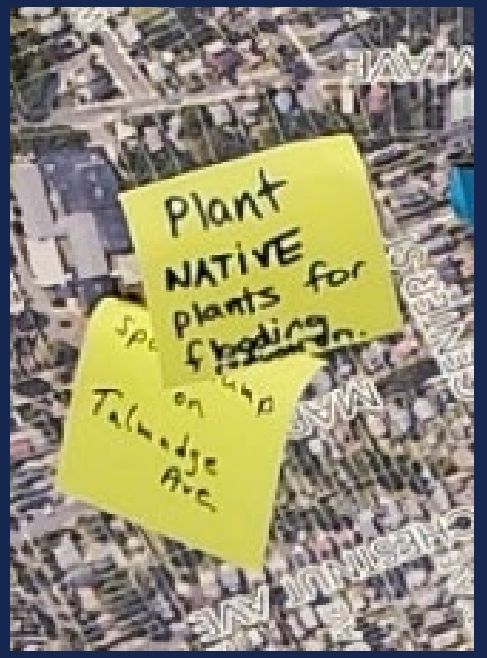
Family-friendly event. Refreshments will be provided.

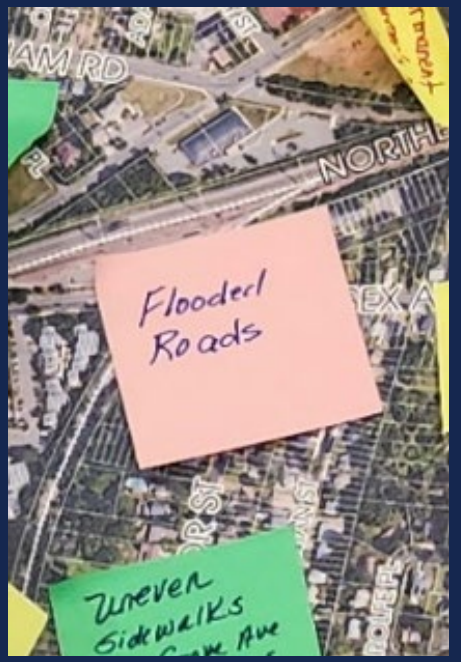
What is a Master Plan? A Master Plan guides the use of land throughout the Borough and includes a statement of goals, objectives, principles and strategies.

Why? By law, a Master Plan must be reexamined or updated at least every 10 years. The Borough's Master Plan was last reexamined in 2016.

Have questions?
Email Linda Koskoski, Director of Economic Development
lkoskoski@metuchen.com

Stay in the loop!
www.metuchennj.org

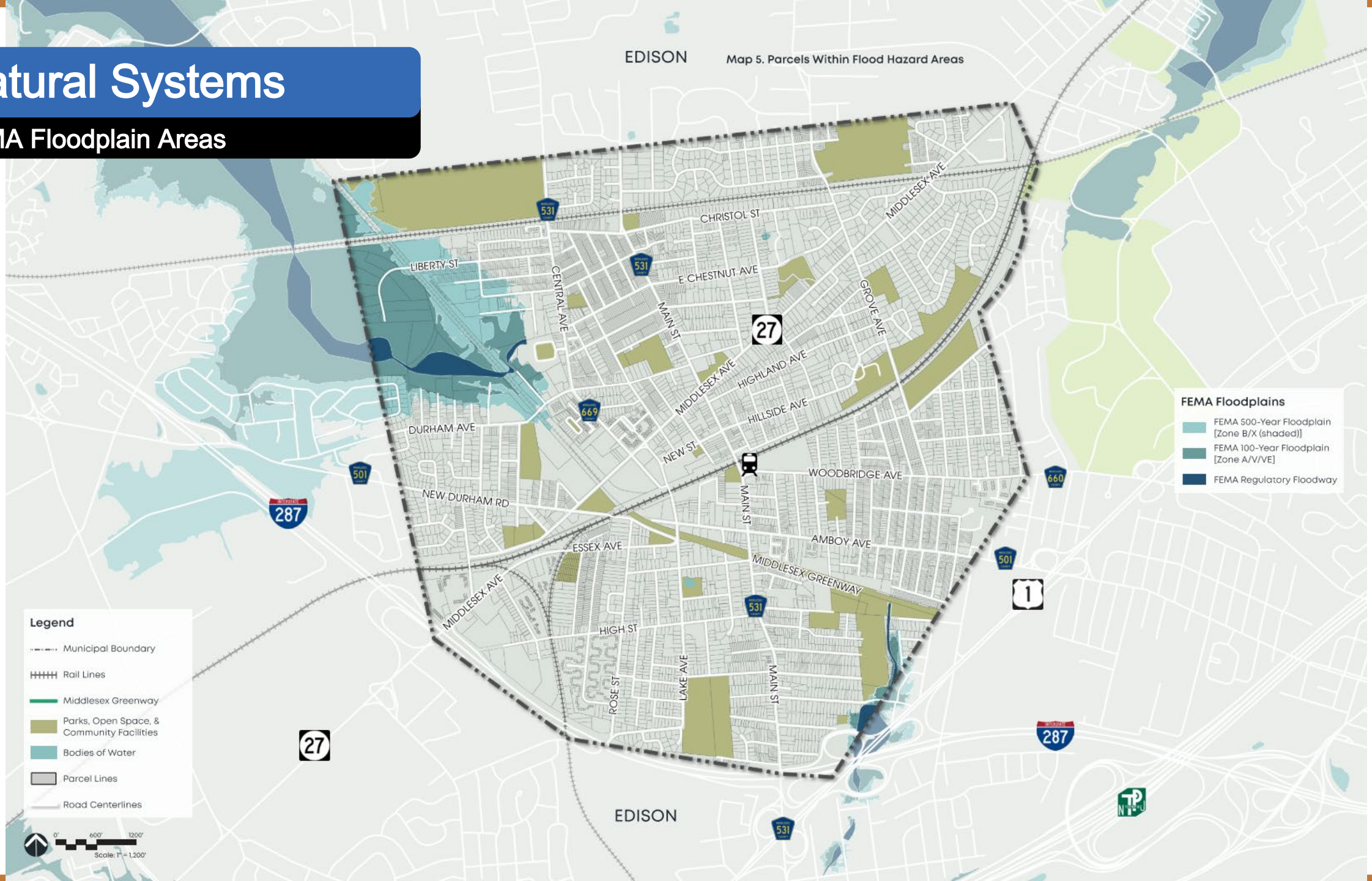




- Empowering and Giving a Voice to Residents aka “the local experts”
  - Microbursts / powerful storms
  - Downed trees / power outages
  - Intense rainfall / flash flooding
  - Value tree canopy / community character
  - Too much impervious surfaces
  - Extreme heat

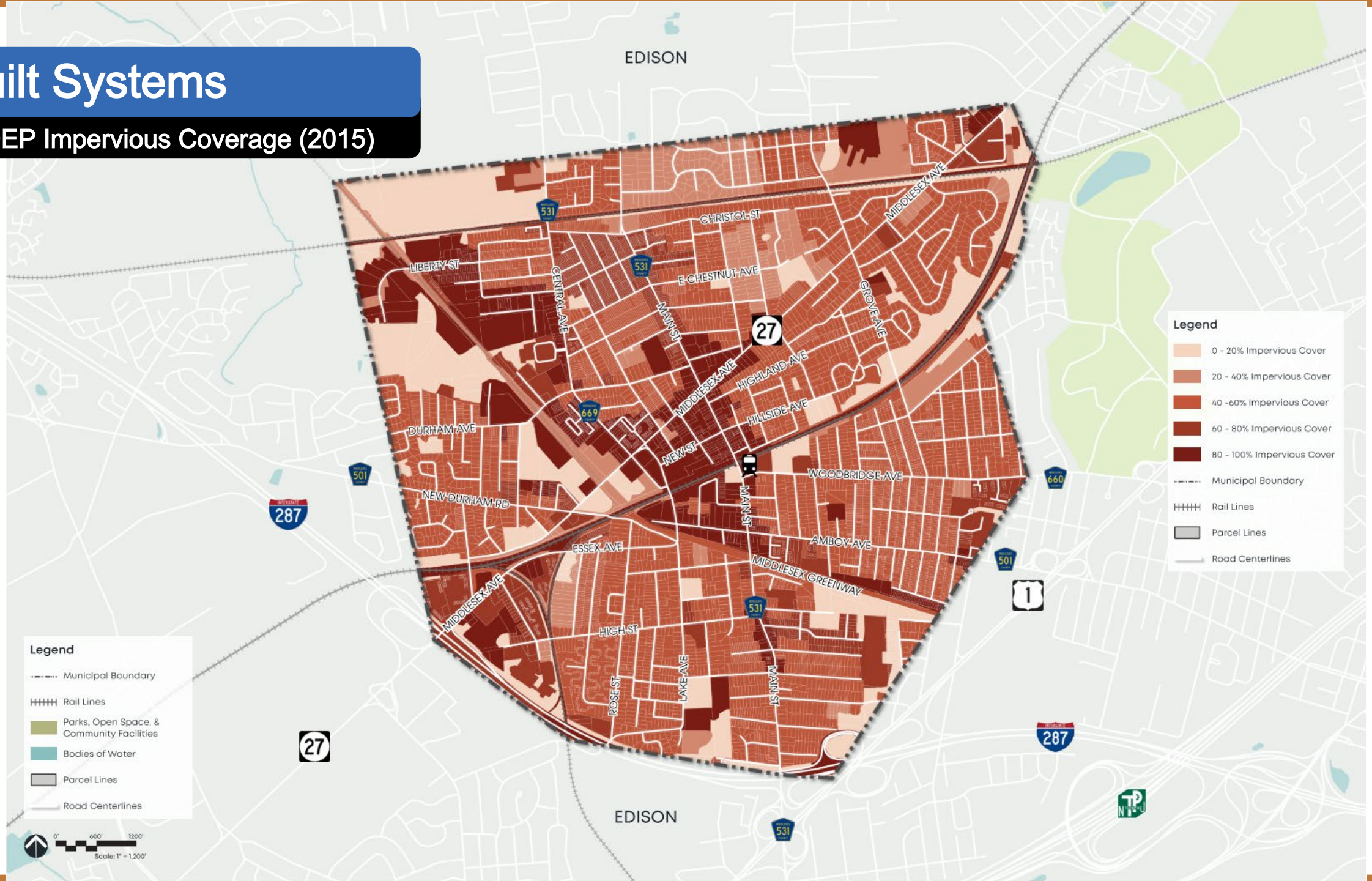
Natural Systems

FEMA Floodplain Areas



Built Systems

NJDEP Impervious Coverage (2015)



Tools & Partnerships

- Sustainable Jersey & NJDEP programs
- Guide to Local Climate Change Adaptation Planning (NJF)
- Local, County, State, Regional & Federal partners
- Technical Assistance & Funding Opportunities

- Update Master Plan / Vulnerability Assessment
- Meaningful Community Engagement
- Stakeholder Interviews / Cross-Department Collaboration
- Integrate Climate Readiness into Everything Land Use

Protecting your community from wildfires through Firewise USA and Community Wildfire Protection Plans

WILLIAM LOVE JR.

ASSISTANT DIVISION FOREST FIRE WARDEN

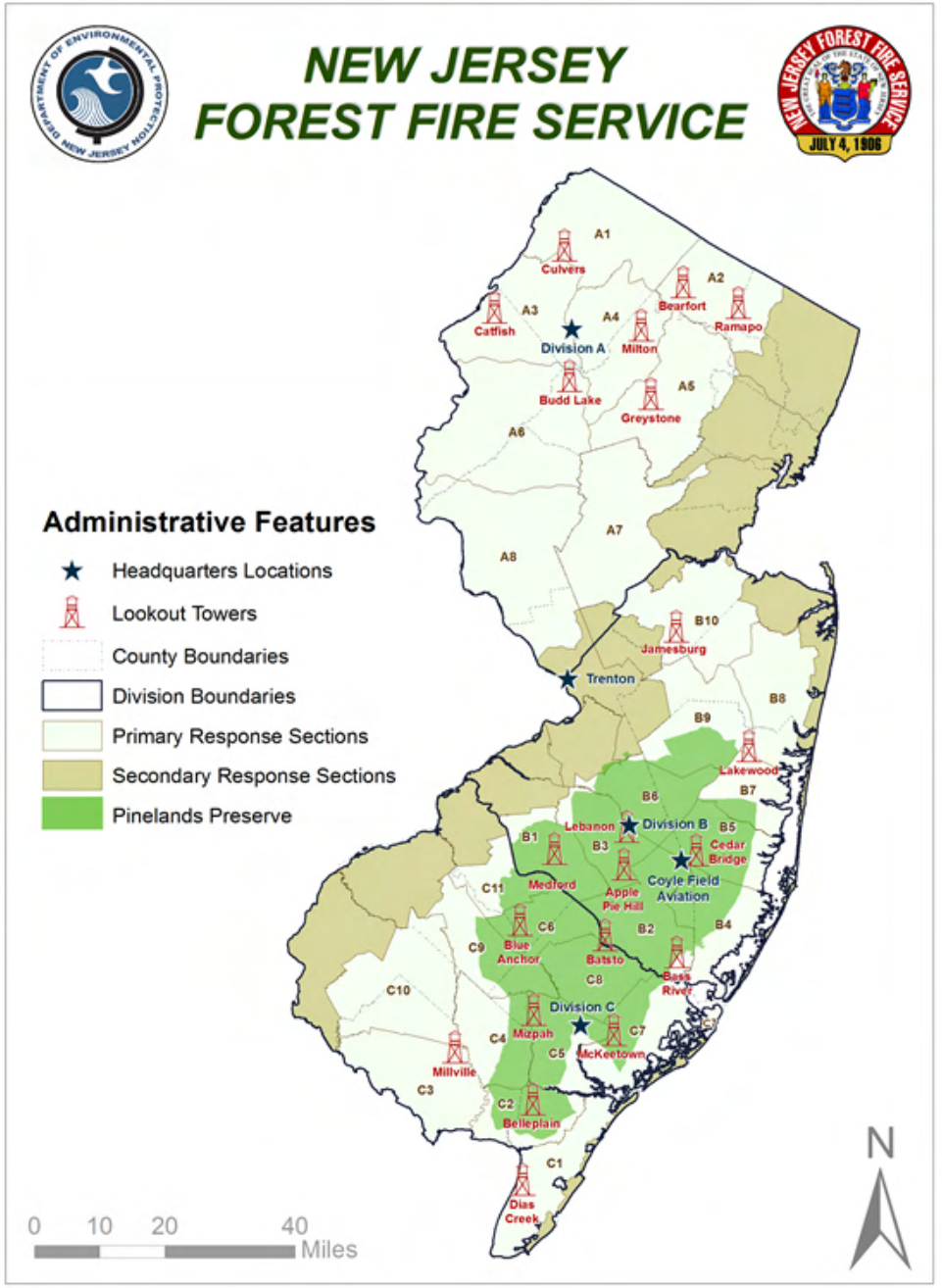
NJ FOREST FIRE SERVICE

- Protecting Life, Property, and Natural Resources from Wildfire since 1906

NJFFS Administrative Boundaries

3 Geographic Divisions

- Division A - North of Raritan River
  - 8 Sections
  - 7 Fire Towers
- Division B - Between Raritan and Mullica Rivers
  - 10 Sections
  - 8 Fire Towers
- Division C - South of the Mullica River
  - 11 Sections
  - 6 Fire Towers



Marie Cook, GISS NJFFS

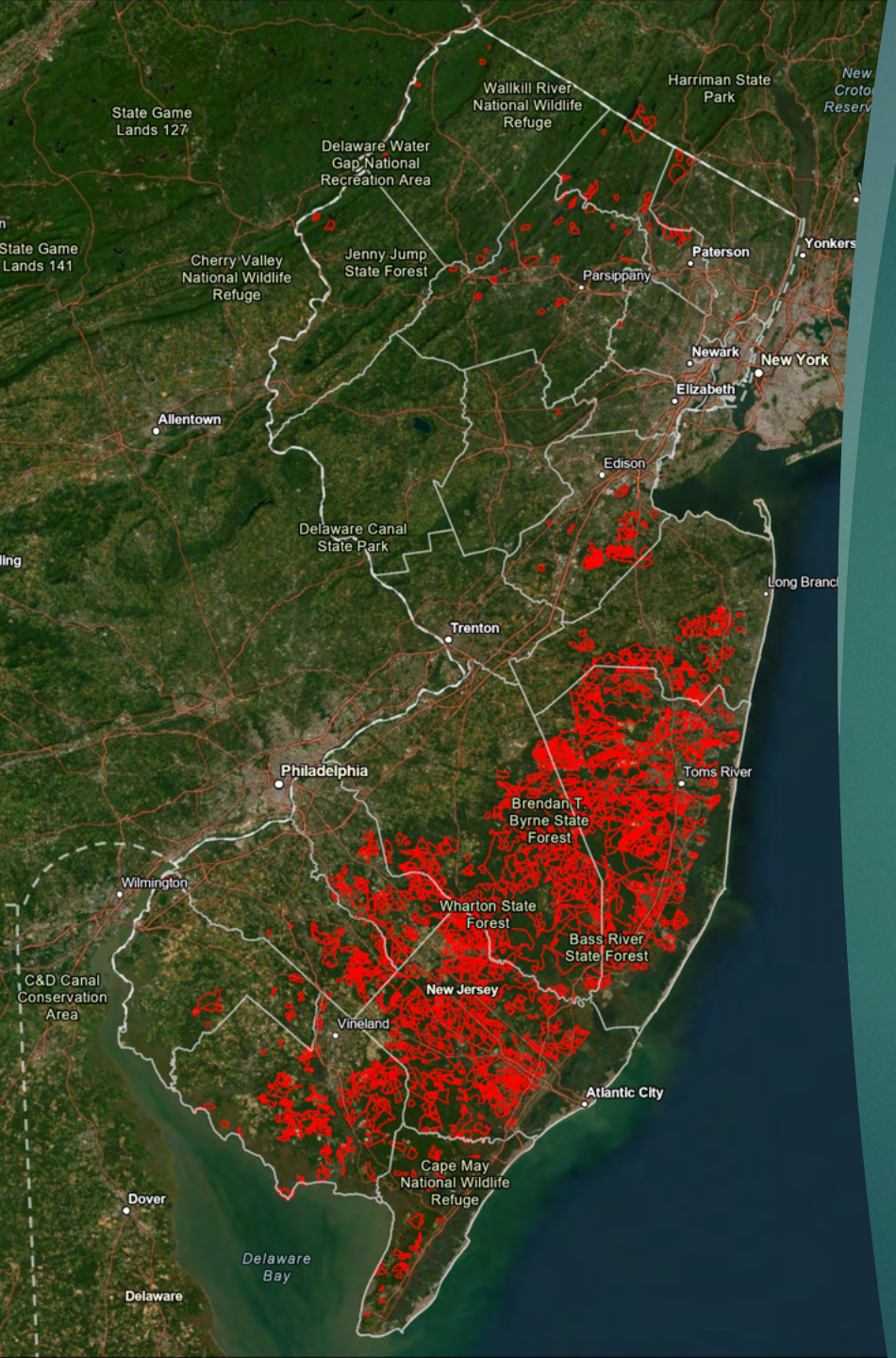
Units respond anywhere when needed

FOREST FIRE ATSION LAKE
OCTOBER 2008

August Complex Northern California

Yukon River Rampart Alaska

Boundary Waters Canoe Area Wilderness Minnesota



Historical Fires Impact on the Land 1924-2024

Marie Cook, GISS
NJ Forest Fire Service
Trenton Headquarters

Shrub Group

Fire Behavior Fuel Model 4

Fires intensity and fast-spreading fires involve the foliage and live and dead fine woody material in the crowns of a nearly continuous secondary overstory. Stands of mature shrubs, 6 or more feet tall, such as California mixed chaparral, the high pocosin along the east coast, the pinebarrens of New Jersey, or the closed jack pine stands of the north-central States are typical candidates. Besides flammable foliage, dead woody material in the stands significantly contributes to the fire intensity. Height of stands qualifying for this model depends on local conditions. A deep litter layer may also hamper suppression efforts. Photographs 9, 10, 11, and 12 depict examples fitting this fuel model.

This fuel model represents 1978 NFDRS fuel models B and O; fire behavior estimates are more severe than obtained by models B or O.

Fuel model values for estimating fire behavior

Total fuel load, < 3-inch dead and live, tons/acre	13.0
Dead fuel load, ¼-inch, tons/acre	5.0
Live fuel load, foliage, tons/acre	5.0
Fuel bed depth, feet	6.0

Photo 9. Mixed chaparral of southern California; note dead fuel component in branchwood.

Photo 10. Chaparral composed of manzanita and chamise near the Inaja Fire Memorial, Calif.

Photo 11. Pocosin shrub field composed of species like fetterbush, gallberry, and the bays.

Photo 12. High shrub southern rough with quantity of dead limbwood.

Shrub Group

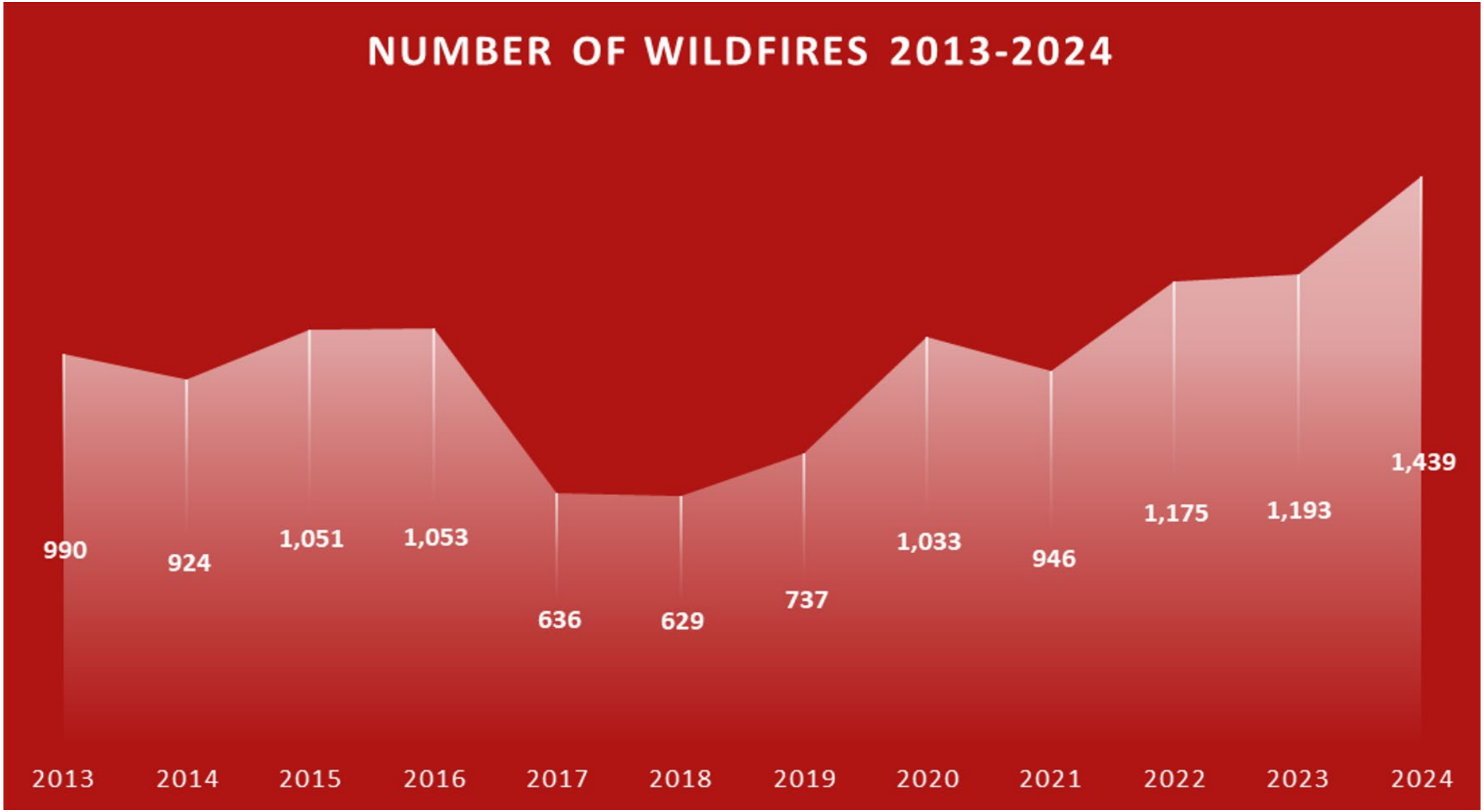
Fire Behavior Fuel Model 4

Fires intensity and fast-spreading fires involve the foliage and live and dead fine woody material in the crowns of a nearly continuous secondary overstory. Stands of mature shrubs, 6 or more feet tall, such as California mixed chaparral, the high pocosin along the east coast, the pinebarrens of New Jersey, or the closed jack pine stands of the north-central States are typical candidates. Besides flammable foliage, dead woody material in the stands significantly contributes to the fire intensity.

Wildfire Today
Wildfire and fire aviation news from around the world

Only the most extreme climate models should be used to plan for future wildfire risk, study finds

Hunter Bassler | November 13, 2025


NUMBER OF WILDFIRES 2013-2024
990
924
1,051
1,053
636
629
737
1,033
946
1,175
1,193
1,439
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024


Sunday Press
CHAR NEW JERSEY
PARK SUNDAY PRESS
10 Shore Homes Destroyed
By Wind-Driven Woods Fires
The Ocean County
DOWNTOWN FIRE CHARS 11 STORIES AS FOREST
SUFFERS WORST BLAZE IN 30 YEARS; 3 PERISH
FOREST FIRES
ASBURY PARK EVENING PRESS
3 Missing in Jackson;
Fires Level 52 Homes
Atlantic City Press
2 Dead, 87 Hurt, Damage $3 Million
As Fires Rage On In South Jersey
TIMES-ADVERTISER
15 Homes Lost in 105,000 Acre Forest Fire
This Day in History: April 20, 1963

Major fires in New Jersey on April 20, 1963

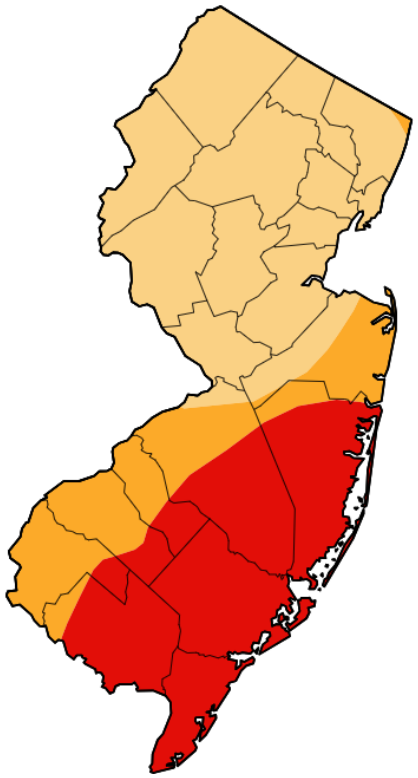
Location	Start time	Acres burned
Division A—North Jersey		
1. Lebanon Township, Hunterdon County	9:00 am	150
2. Warren Township, Somerset County	9:30 am	100
Division B—Central Jersey		
1. Jackson Township, Ocean County	9:54 am	1,200
2. Berkeley Township, Ocean County	10:00 am	700
3. Jackson/Frenchhold Township, Monmouth & Ocean Counties	10:28 am	4,480
4. Brick Township, Ocean County	10:45 am	600
5. Old Bridge Township, Middlesex County	12:13 pm	275
6. Stafford Township, Ocean County	12:30 pm	190
7. Jackson Township, Ocean County	12:30 pm	14,000
8. Pemberton Township, Ocean County	12:30 pm	1,900
9. Pemberton, Woodland, Manchester, Lacey, Stafford & Barnegat Townships, Ocean & Burlington Counties	12:45 pm	74,475
10. Jackson Township, Ocean County	1:08 pm	11,300
11. Marlboro/Old Bridge Townships, Middlesex County	2:15 pm	2,000
12. Howell Township, Monmouth County	2:38 pm	800
13. Evesham/Medford Townships, Burlington County	3:15 pm	575
Division C—South Jersey		
1. Clayton Township, Gloucester County	9:00 am	1,900
2. Mullica Township, Atlantic County	9:20 am	11,500
3. Franklin Township, Gloucester County	9:45 am	600
4. Buena Township, Atlantic County	10:50 am	12,600
5. Monroe Township, Gloucester County	11:00 am	2,700
6. Winslow Township, Camden County	11:15 am	2,215
7. Lindenwold/Gibbsboro Townships, Camden County	12:10 pm	260
8. Monroe Township, Gloucester County	12:30 pm	2,000
9. Alloway Township, Salem County	12:30 pm	1,000
10. Hamilton Township, Atlantic County	1:00 pm	4,160
11. Hamilton Township, Atlantic County	1:15 pm	15,000
12. Hamilton/Egg Harbor Townships, Atlantic County	1:20 pm	14,500
13. Egg Harbor Township, Atlantic County	4:20 pm	1,250

Damage to improved property caused by fires in New Jersey on April 20, 1963

186 Houses damaged or destroyed
191 Outbuildings (sheds, barns, garages, chicken coops)
12 House trailers
5 Camp buildings destroyed, 1 damaged
3 Churches
2 Sawmills
1 Bar/restaurant
1 Government office building
1 Laundromat
1 Gas station
3 Hunting club buildings
23 Vehicles
2 Blueberry fields
45 Acres of cranberries
$70,000 Pulpwood value

US Drought Monitor

New Jersey



Map released: Thurs. January 9, 2025

Data valid: January 7, 2025 at 7 a.m. EST

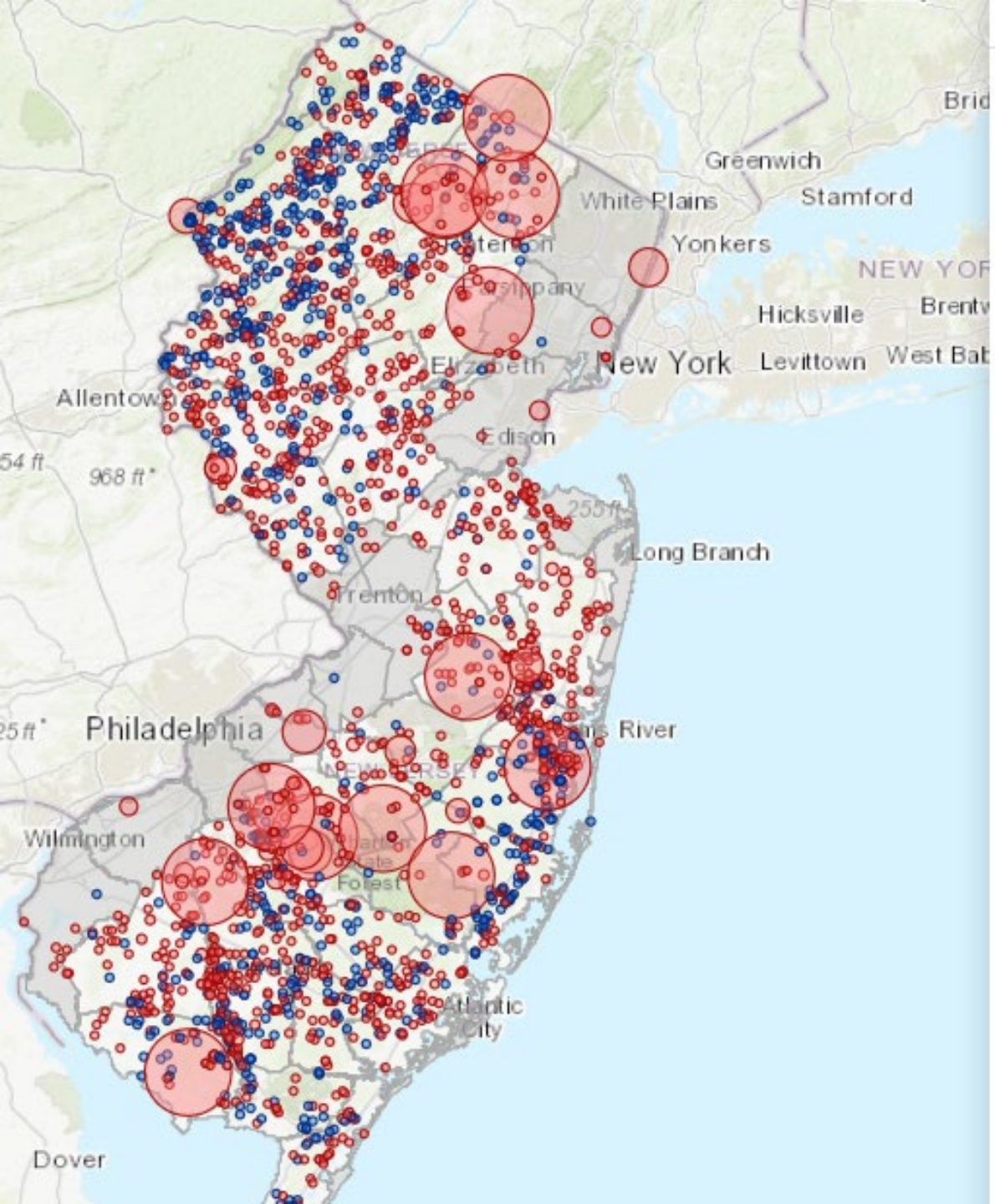
Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

Authors

United States and Puerto Rico Author(s):
Brad Pugh, NOAA/CPC

Pacific Islands and Virgin Islands Author(s):
Richard Tinker, NOAA/NWS/NCEP/CPC



Incidents

- Wildfires
- Other Incidents

Fire Size

- > 100
- 80
- 50
- 30
- < 1

2024 NJFFS Incident Responses

2024 Major Wildfires

J. Douglas, NJDEP 2024

YEAR	FIRE NAME	FIRE SIZE (ACRES)	START DATE	DAYS TO 100% CONTAINMENT
2024	**County Line**	510	4/24/2024	1
2024	**Tea Time Hill**	4,000	7/4/2024	7
2024	**Whip-poor-will**	1,167	7/26/2024	1
2024	**Fishers Pit**	189	9/9/2024	2
2024	**Industrial Parkway**	196	10/26/2024	25
2024	**Halloween**	137	10/31/2024	19
2024	**Craigmeur Lookout**	211	10/31/2024	20
2024	**Shotgun**	350	11/6/2024	15
2024	**Bethany Run**	360	11/7/2024	13
2024	**Pheasant Run**	133	11/7/2024	27
2024	**Cannonball 3**	182	11/8/2024	3
2024	**Jennings Creek**	2,283 (in NJ)	11/8/2024	14

NJFFS 2024 Annual Summary

Incident Responses and Prescribed Burns

Filter causes and charts by Division: State | A | B | C

or Section: State

100 - Lightning	4	acres 1
200 - Campfire	133	acres 306
300 - Smoker	79	acres 47.25
400 - Debris Burning	82	acres 78.75
500 - Incendiary	47	acres 427.5
600 - Equipment	458	acres 301.5
700 - Railroad	21	acres 82.25
800 - Children	62	acres 511
900 - Misc	507	acres 1,768.75

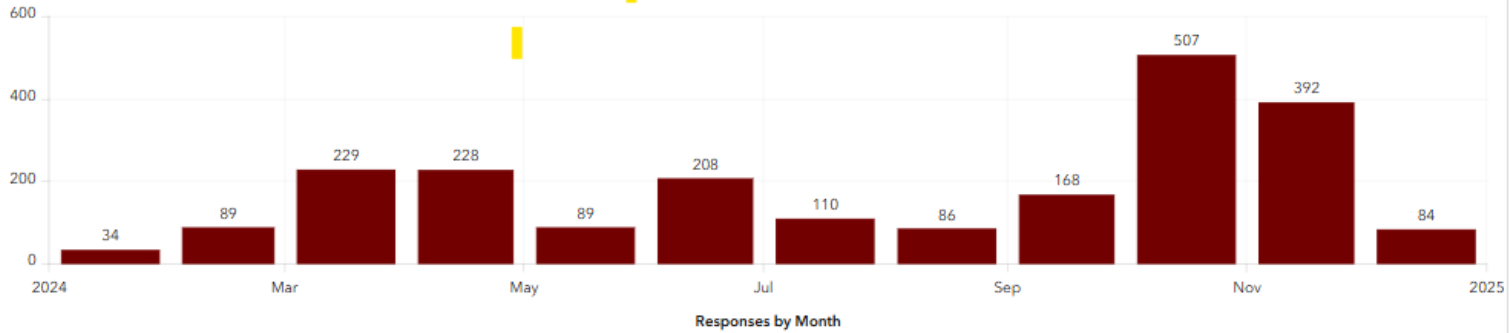
Wildfire Types

Forest	732
Grass	339
Brush	322
Other	47

Other Incident Types

Unauth Burn Invest	445
Smoke Invest	92
Other	247

Responses by Month



Responses by Month

RxB Acres - Fuels

Forest	10,844
Grass	4,645

RxB Acres - Owners

Fish & Wildlife	5,624
Parks & Forestry	5,023
Non-DEP Owners	4,841

wildfires

1,440

A	B	C
544	410	486

other incidents

784

A	B	C
414	151	219

total incidents

2,224

A	B	C
958	561	705

wildfire acres

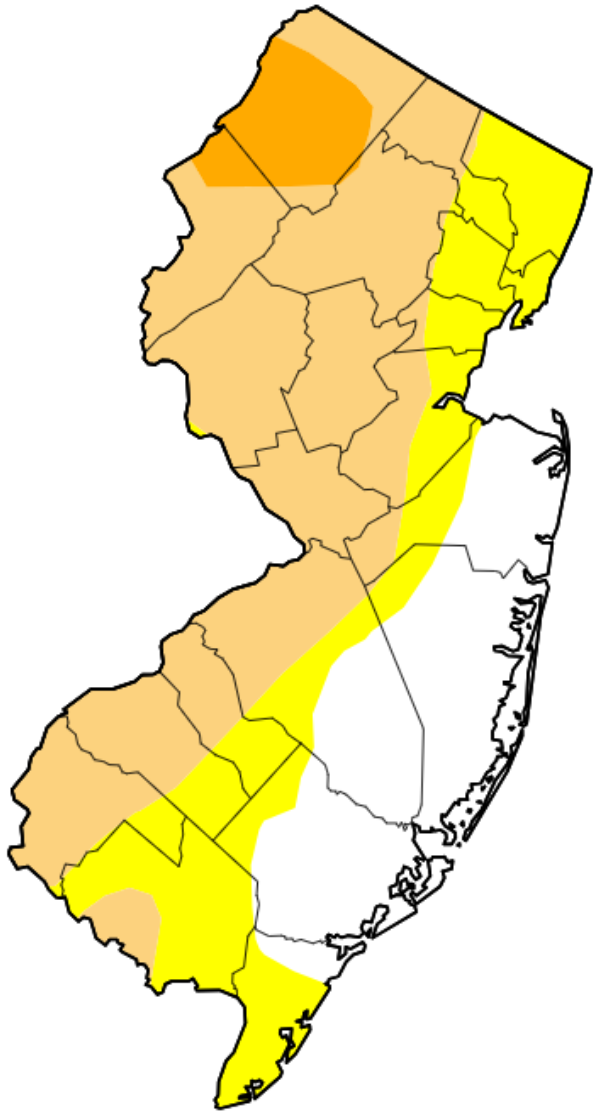
12,420

A	B	C
3,412	7,787	1,221

RxB acres

15,488

A	B	C
1,662	15,040	3,640



Map released: Thurs. November 6, 2025

Data valid: November 4, 2025 at 7 a.m. EST

Intensity

- None
- **D0** (Abnormally Dry)
- **D1** (Moderate Drought)
- **D2** (Severe Drought)
- **D3** (Extreme Drought)
- **D4** (Exceptional Drought)
- No Data

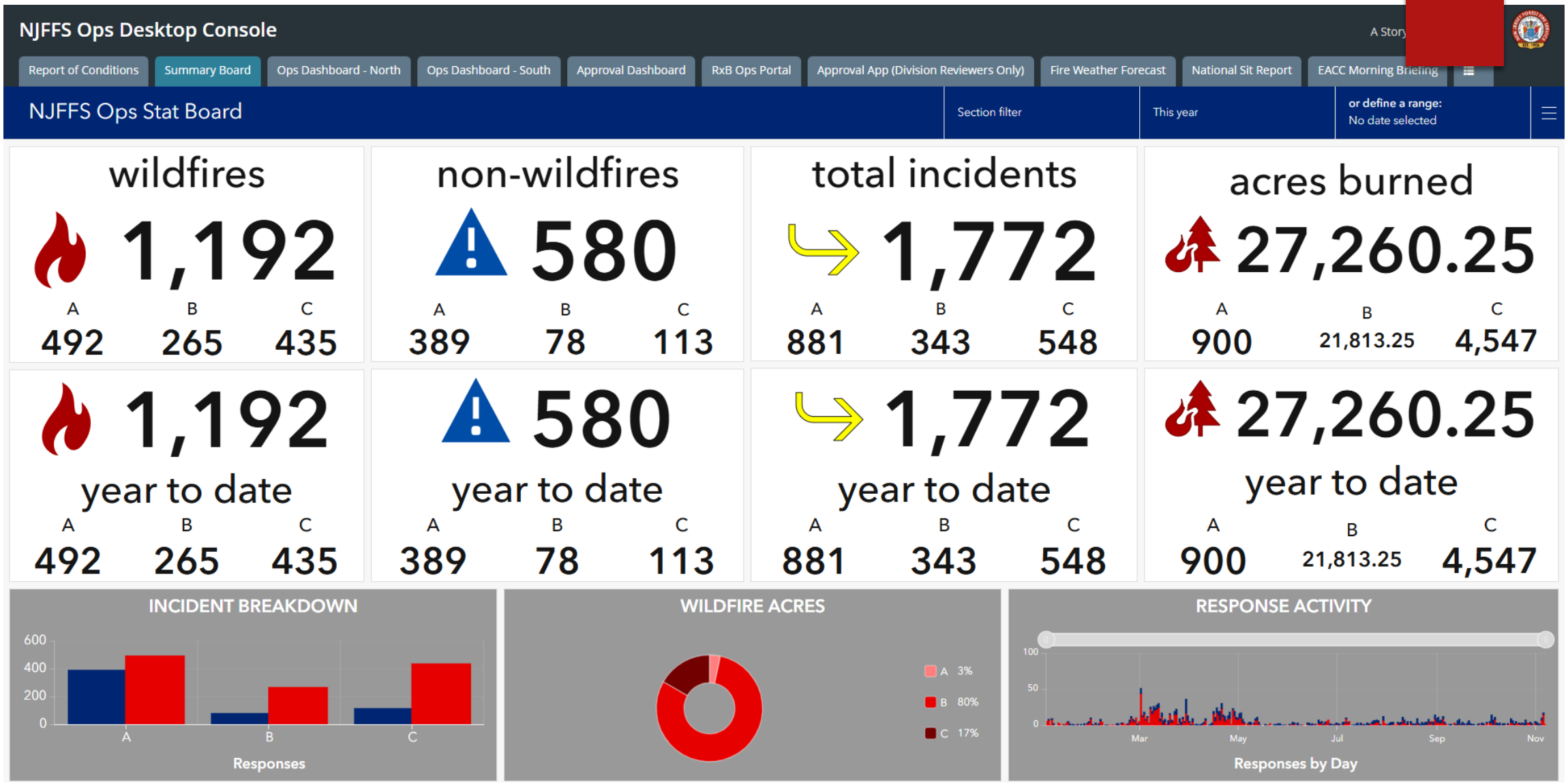
Authors

United States and Puerto Rico Author(s):

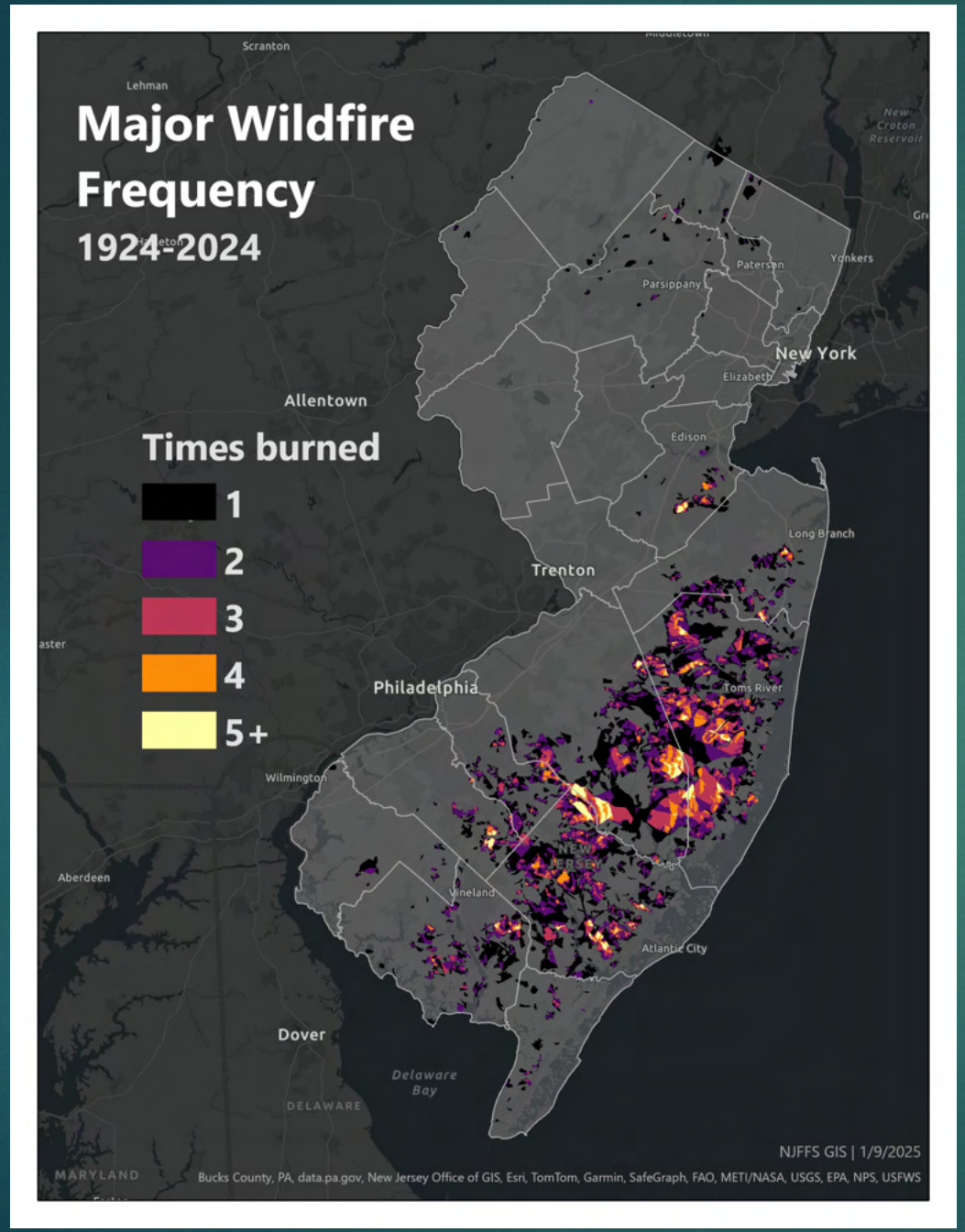
Richard Tinker, NOAA/NWS/NCEP/CPC

Pacific Islands and Virgin Islands Author(s):

Curtis Riganti, National Drought Mitigation Center


NJFFS Ops Desktop Console
A Story
Report of Conditions
Summary Board
Ops Dashboard - North
Ops Dashboard - South
Approval Dashboard
RxB Ops Portal
Approval App (Division Reviewers Only)
Fire Weather Forecast
National Sit Report
EACC Morning Briefing
NJFFS Ops Stat Board
Section filter
This year
or define a range:
No date selected
wildfires
1,192
A 492
B 265
C 435
non-wildfires
580
A 389
B 78
C 113
total incidents
1,772
A 881
B 343
C 548
acres burned
27,260.25
A 900
B 21,813.25
C 4,547
1,192
year to date
A 492
B 265
C 435
580
year to date
A 389
B 78
C 113
1,772
year to date
A 881
B 343
C 548
27,260.25
year to date
A 900
B 21,813.25
C 4,547
INCIDENT BREAKDOWN
600
400
200
0
A
B
C
Responses
WILDFIRE ACRES
A 3%
B 80%
C 17%
RESPONSE ACTIVITY
100
50
0
Mar
May
Jul
Sep
Nov
Responses by Day

JONES ROAD WILDFIRE



Major Wildfire Frequency

Fires 100 acres or greater

Marie Cook, GISS
NJ Forest Fire Service

5- Wildfire History

Larger fires (those comprising more than 100 acres in size) generally occur in this region during March, April, & May (Spring Fire Season) because of warm temperatures, low humidity, and gusty winds. These weather conditions are common during the spring. However, due to the high chemical content of these flammable forest fuels, large fires have occurred in this region during summer months of the year during periods of low rain fall and high winds. In May of 1992, a 4,800 acre wildfire affected Lacey and Ocean Townships. Another wildfire burning 5,400 acres, again in Lacey Twp. occurred in June of that year. Then in 1995, a wind driven 20,000 acre wildfire was heading toward present day Greenbriar Oceanaire but was stopped at the Garden State Parkway less than a ¼ mile from the community. Again in 2007, a 16,000 acre wildfire was heading for the area. However, it was contained in adjacent Barnegat Twp. Smaller fires have been reported annually for this area. The last known major wildfire that burned through the forest where Greenbriar Woodlands stands today was in Lakewood in March (about 2 miles away) of 2020 and burnt through 700 acres and impacted 26 buildings. Presently, there are many years of growth for the fuels that burned from the various wildfire. Because most species of the Pine Barrens are fire dependent, nature has rebounded with an abundance of immature growth to create a "ladder fuel' source and thick mid canopy layer that would allow a surface fire to *ladder up* to the canopy and create a crown fire.

In addition to these accumulated fuels and adjacent homes, Greenbriar Woodlands is a typical example of woodland urban interface (WUI), a community within the forest where precaution and prevention can reduce the risk to the residents of wildfire. Personal property such as decks, landscaping and woodland debris may become additional fuel and could become damaged from such wildfires.

Industrial Parkway Wildfire,(10/26/24)

Livingston, Essex County (196 acres)


WILDFIRE UPDATE
Poor Farm Wildfire
Hopewell Twp., Mercer County
293 acres - 90% contained
0 structures threatened
Final incident update

Jennings Creek Wildfire (11/8/2024)

West Milford, Passaic County (2,283 acres in NJ - 3021 acres in NY)

The best way to protect your home from a wildfire

is before the wildfire happens:

Hurricanefighters?

House Raising For Hurricanes

What we do to protect your home

Firebreaks

Prescribed Burning

Prescribed Burning 2015 Belleplain SF

Mechanical Thinning Cape May National Wildlife Refuge

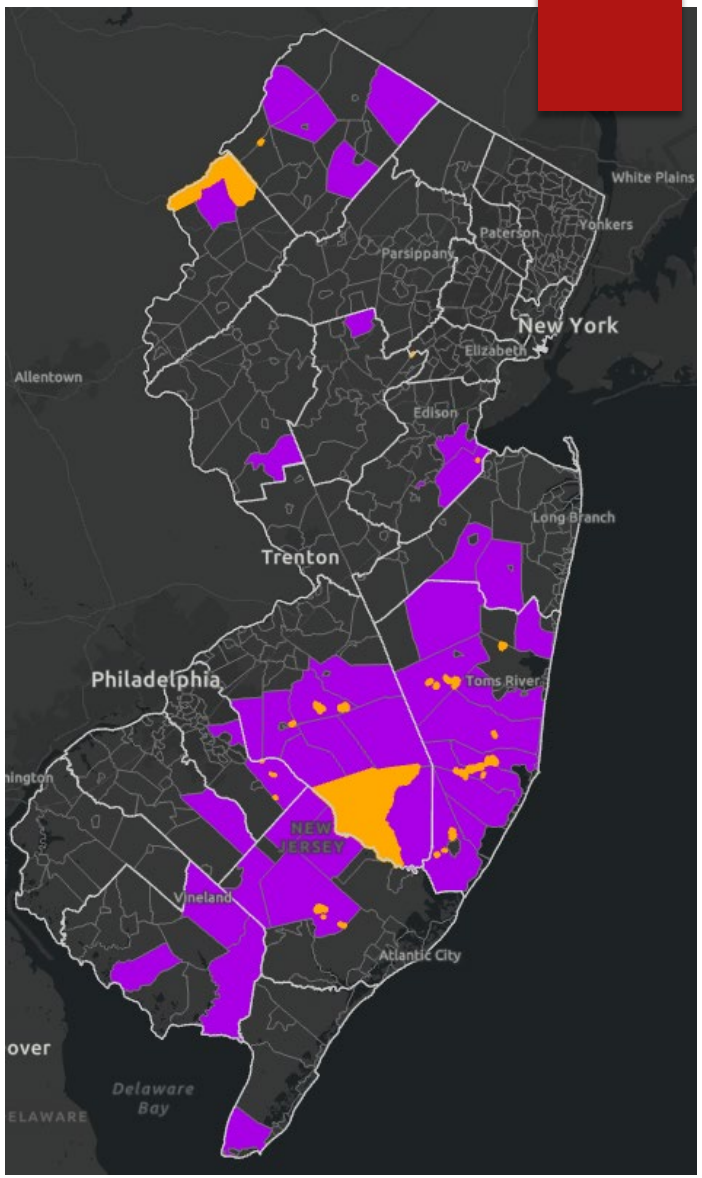
Wildfire Prevention in New Jersey- I & E

- 400 + Educational programs annually by NJ Forest Fire Service staff
- School based programming – Smokey Bear K-5
- Fire Prevention Week
- Community Outreach and Engagement – Members of their community (National Night Out, parades, fairs, local, county and statewide events, Teacher's Convention character Quincy, Library Convention Smokey's 80th)
- Smokey Bear's 21st Century messaging 99% Wildfires in NJ caused by humans. Lightning accounted for an increased % over the past decade. Message from 1947 Only You Can Prevent Wildfires evolved into Only You Can Prevent Wildfires in 2001.
- Federal based partnerships and funding. Turnpike and GSP electronic and billboard funded by US AD Council.
- Mid Atlantic Forest Fire Protection Compact
- Social Media & Digital Media

What can You do to protect the homes In your community?

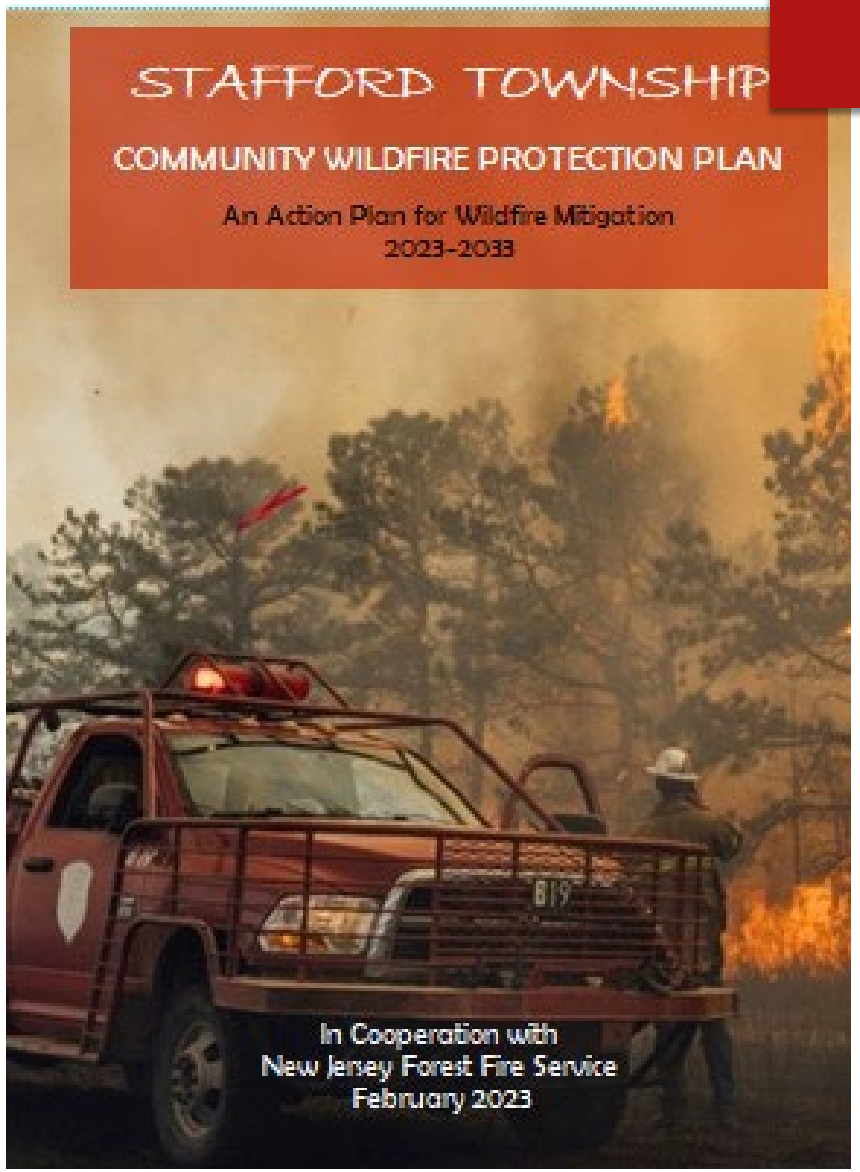
Community Wildfire Protection Plans (CWPP)

- 46 CWPP's statewide
- Township-based plans
- Currently funded Community Wildfire Defense Grant (CWDG) Bi-Partisan Infrastructure Law (BIL)
  - Wildfire Risk
  - Low Income
  - Sever Storm Disaster related to wildfire
- NJ CWPP collaborative planning tool
  - NJ WRAP



CWPP - Plan to Action

- Assess Wildfire Risk
- Prioritize Risk Reduction Actions
- Collaborate with Partners
- Maintenance



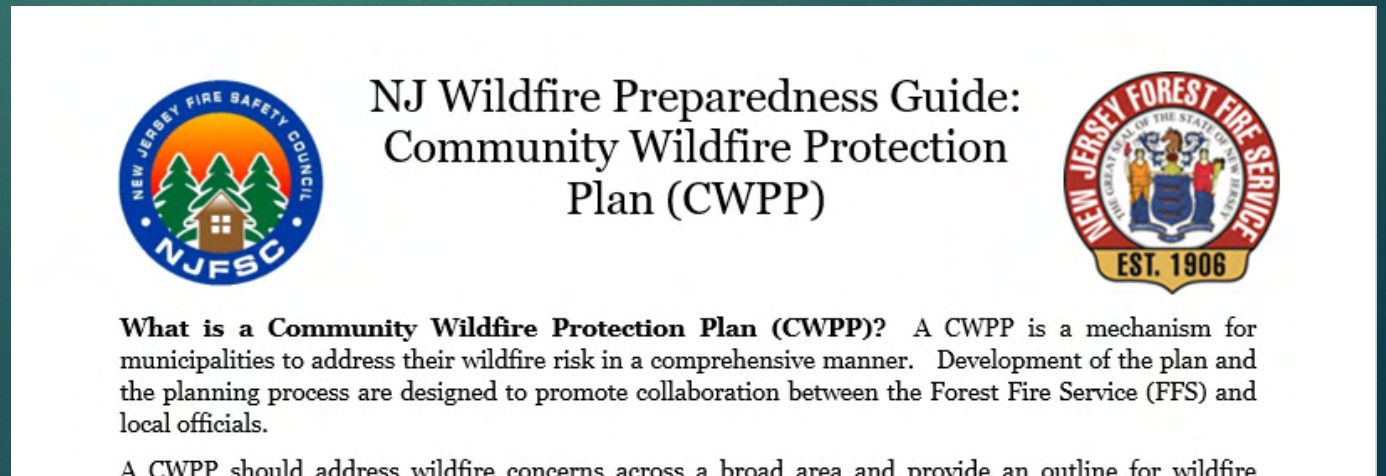
CWPP- ACTIONS (examples)

FOREST FUEL REDUCTION

- Firebreak & Fuel Break
- RxB
- Mechanical Thinning
- Road and Roadside mowing
- Ladder Fuel Reduction
- Firewise Practices

COMMUNITY PREPAREDNESS

- Evacuation Plans
- Hydrant – Dry and Plan
- Rules / Ordinances
- Outreach & Education



NJ Wildfire Preparedness Guide: Community Wildfire Protection Plan (CWPP)

What is a Community Wildfire Protection Plan (CWPP)? A CWPP is a mechanism for municipalities to address their wildfire risk in a comprehensive manner. Development of the plan and the planning process are designed to promote collaboration between the Forest Fire Service (FFS) and local officials.

A CWPP should address wildfire concerns across a broad area and provide an outline for wildfire

LIVING CWPP
Wildfire Protection Planning Tool

HO ES

About the Living CWPP

The Living CWPP (LCWPP) is a tool that makes it easier for communities to develop consistent, straightforward, and actionable Community Wildfire Protection Plans whose projects can be readily tracked and kept current. The Living CWPP:

- Empowers local jurisdictions, fire departments, and state agencies to take ownership of wildfire planning.
- Supports planning through GIS tools, data visualization, and collaborative workflows.
- Enables action by tracking mitigation projects and implementation.
- Promotes adaptation by keeping CWPPs current and responsive to changing conditions.

USDA

COMMUNITY WILDFIRE DEFENSE GRANTS

Protecting communities, infrastructure, and natural resources from the threat of wildfires.

New Jersey

Partner	Funding	Project Title / Description
Maurice River Township	$117,000	**Fire & Fuel Break - "Cumberland Fireline"** Create firebreaks and reduce forest fuel loading by use of prescribed fire. The project will then introduce a prescribed fire program on lands adjacent to the firebreak in a safe and efficient way.
Township of Brick	$108,750	**Brick New Jersey WUI** Establish a comprehensive, actionable, measurable community program to plan and implement mitigation. Project activities will include purchasing equipment and conducting prescribed burn and mechanical fuel removal, establishing a Wildfire Awareness Program to include education and outreach about prevention and emergencies and establishing community clean up in hazard mitigation areas.

Funded Proposals (in Alphabetical order):

2025 (Round Three) Awards - Current Year −

- Arizona +
- Arkansas +
- California +
- Colorado +
- Georgia +
- Hawaii +
- Idaho +
- Kentucky +
- Maine +
- Massachusetts +
- Minnesota +
- Montana +
- Nebraska +

Nebraska

Partner	Funding	Project Title / Description
Nebraska Forest Service	$5,191,260	**Brown County Mitigation Crew** This project will support collaboration between Nebraska Forest Service (NFS) and private landowners to establish fuel breaks adjacent to structures and along strategic terrain features totaling 150 acres. A lack of available contractors in the area has led to unfinished projects and a backlog of needed work in the area, so 10 NFS foresters and needed supplies will be hired to plan and conduct this work. 150 priority acres will be treated to create a fuel break protecting the Hidden Paradise community and the Long Pine Recreation Area.
Nebraska Forest Service	$9,806,233	**Stop the Burn: Creating Resilient Working Lands for Brown County** This project will focus on creating at least 2500 acres of strategic fuel breaks and firebreaks in this steep, remote, and volatile landscape to protect communities, rural homes, and ranch structures. This project will allow the county, landowners, and partners to work together to protect communities by creating a more resilient environment. The project will also foster collaboration with the Nebraska Forest Service (NFS) and neighboring counties and hire a forester/project leader who will work with private landowners to raise community awareness of their CWPP and design, implement and manage individual fuels reduction projects that will be maintained over the next 10 years.
Nebraska Forest Service	$9,806,233	**Stop the Burn: Creating Resilient Working Lands for Rock County** This project will focus on creating strategic fuel breaks and firebreaks in Rock County, NE in steep, remote, and volatile landscape to protect communities, rural homes, and ranch structures. This project will allow the county, landowners, and partners to work together to protect communities by creating a more resilient environment.

NFPA®

FIREWISE USA®

Residents reducing wildfire risks

Firewise USA – New Jersey Forest Fire Service

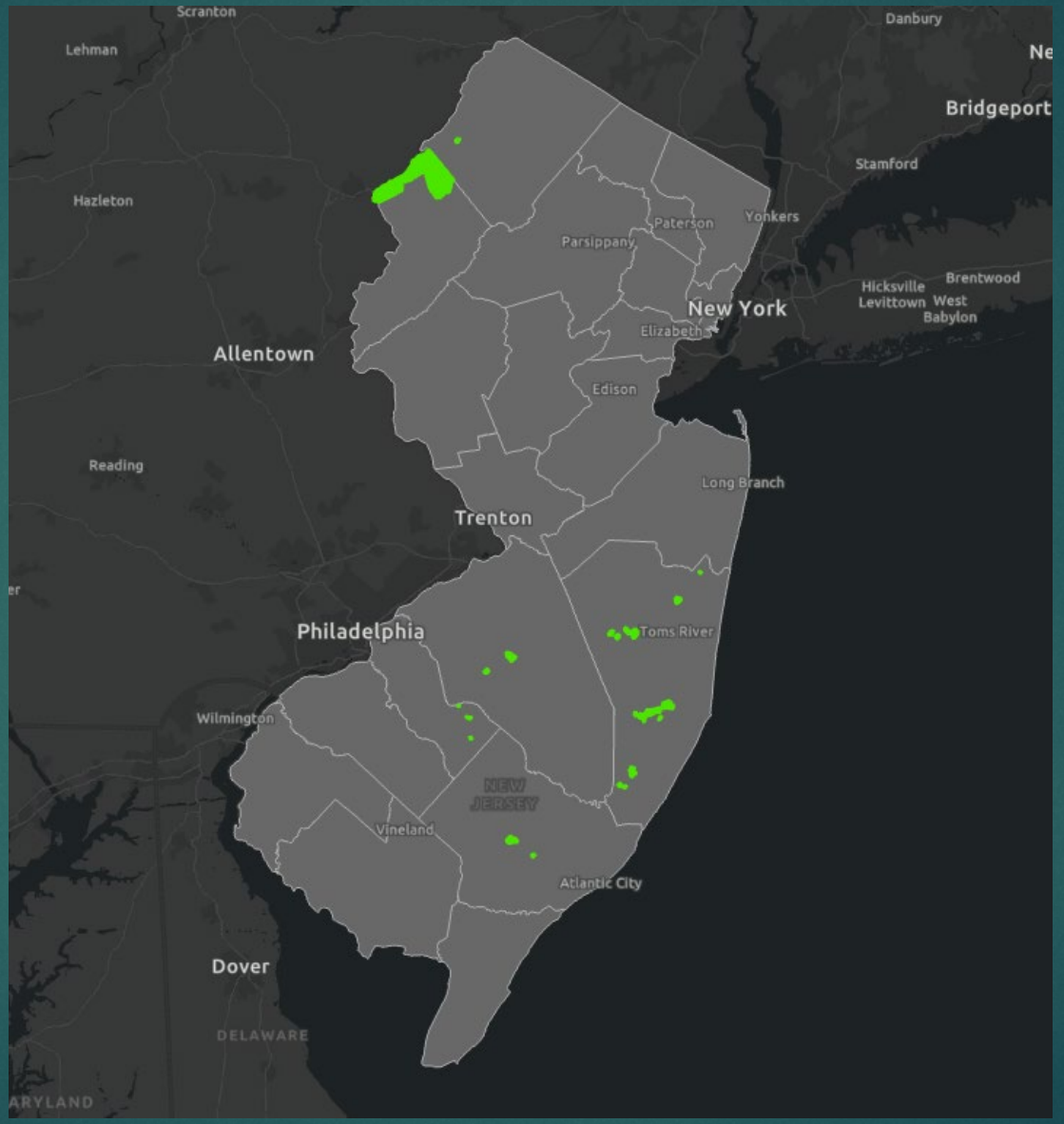
FIREWISE USA®

RESIDENTS REDUCING WILDFIRE RISKS

What is NFPA Firewise USA®?

The FireWise USA, a program of the National Fire Protection Association, encourages local solutions for safety by involving homeowners in taking individual responsibility for preparing their homes from wildfire risk. The program provides resources to help homeowners learn how to adapt to living with wildfire while encouraging and empowering neighbors to work together to take action now to reduce their wildfire risk and prevent losses.

FIREWISE COMMUNITIES



Firewise Accomplishments in NJ

- 26 Active Firewise Communities
  - 30,000 residents
- Firewise Volunteerism
  - 13,164 Hrs. 2024
  - 78,364 Hrs. since 2017

- Real Dollars Committed 2024
- $1,035,471 in 2024
- $5,275,063 since 2017
  - i.e.. Contractors
  - Chipper Rental
  - Home Hardening
  - Equipment Purchase
- 1,162.57 Cubic Yards of forest fuels removed in 2024

NFPA®

FIREWISE USA®

Residents reducing wildfire risks

Why Firewise?

- In NJ 56 % of all homes are in the WUI.
- Wildfire can destroy the average home in the Pinelands in only 10 minutes.
- We can't predict when wildfire will happen, but we can prepare ourselves for it.
- Safer for residents and for firefighters.
- Not enough fire fighting resources to protect every home.

NFPA® | FIREWISE USA®
RESIDENTS REDUCING WILDFIRE RISKS


Forked River
Mountain
Garden State Pkwy N
Pheasant
Run
Forked River
S Main St
Jones Road
Wildfire
Barnegat
532
US Highway 9
Greenbriar
Oceanaire
Oceanaire Golf
Brookville
72
554

A Fire-Resistant Home

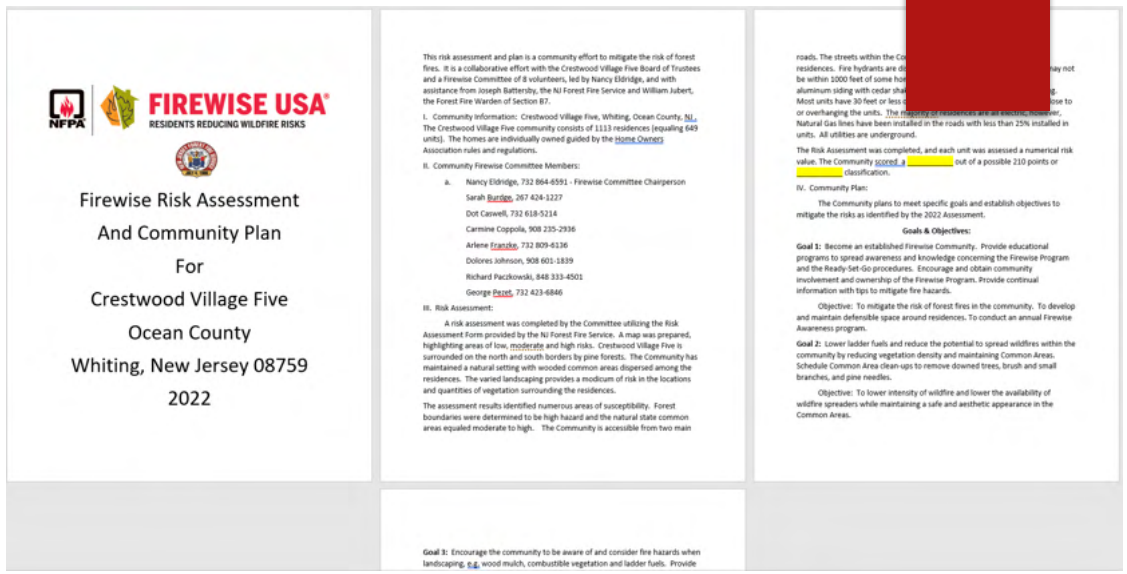
A home's design, building materials and landscape (out to 100 feet) determine its vulnerability to airborne embers, surface fires and crown fires. A fire-resistant home has at least 30 feet of surrounding space that is clear of dead vegetation and flammable debris. It has at least 5 feet of noncombustible mulch material such as river rock or pea gravel. Trees and shrubs are maintained. The landscape consists of healthy, irrigated, fire-resistant vegetation. Within 5-30 feet, trees should have a minimum of 18 feet between treetops.

1. Clean debris from roof and gutters.
2. Trim overhanging branches away from the home and attachments (patios, outbuildings, etc.)
3. Use noncombustible mulch and succulents within 5 feet of structures.
4. Keep lawn mowed, watered, and at a height of 4 inches or less.
5. Landscape with fire-resistant plants and maintain their health.
6. Clear away all dead vegetation and flammable items within 30 feet of structures and propane tanks.
7. Prune branches of large trees to 6-10 feet above the ground.
8. Maintain adequate space between treetops (18 feet).
9. Reduce density of surrounding forest vegetation.
10. Create a firebreak with a driveway wide enough (12 feet) to accommodate emergency vehicles.

The N.C. Forest Service is a division of the N.C. Department of Agriculture and Consumer Services. Steve Troxler, Commissioner

How do you become Firewise?

- Becoming Nationally Recognized Firewise USA Community
- 6 Steps
- Maintain annual certification
- Apply for grants from New Jersey Forest Fire Service



FIREWISE USA
RESIDENTS REDUCING WILDFIRE RISKS

Firewise Risk Assessment
And Community Plan
For
Crestwood Village Five
Ocean County
Whiting, New Jersey 08759
2022

2021

NATIONAL FIREWISE USA® PROGRAM

CERTIFICATE

OF RECOGNITION

The National Fire Protection Association acknowledges that

Crestwood Village Six

located in Manchester Township , NJ

has successfully completed the Firewise USA® program's annual requirements for 2021
and is a participating site in good standing throughout the 2022 calendar year.

James T. Pauley, President, NFPA

FIREWISE USA®

November 17, 2021
Date Issued

The six steps of NFPA Firewise USA® recognition:

1. Form a NFPA Firewise USA® board or committee.
2. Obtain a wildfire risk assessment for your neighborhood or community.*
3. Create an Action Plan.
4. Conduct educational outreach in your neighborhood.
5. Invest a minimum of one hour per dwelling in risk-reduction actions annually.
6. Submit an application to your state Firewise liaison.

NEW JERSEY
WILDFIRE RISK ASSESSMENT PORTAL

Your clearinghouse for wildfire preparedness resources

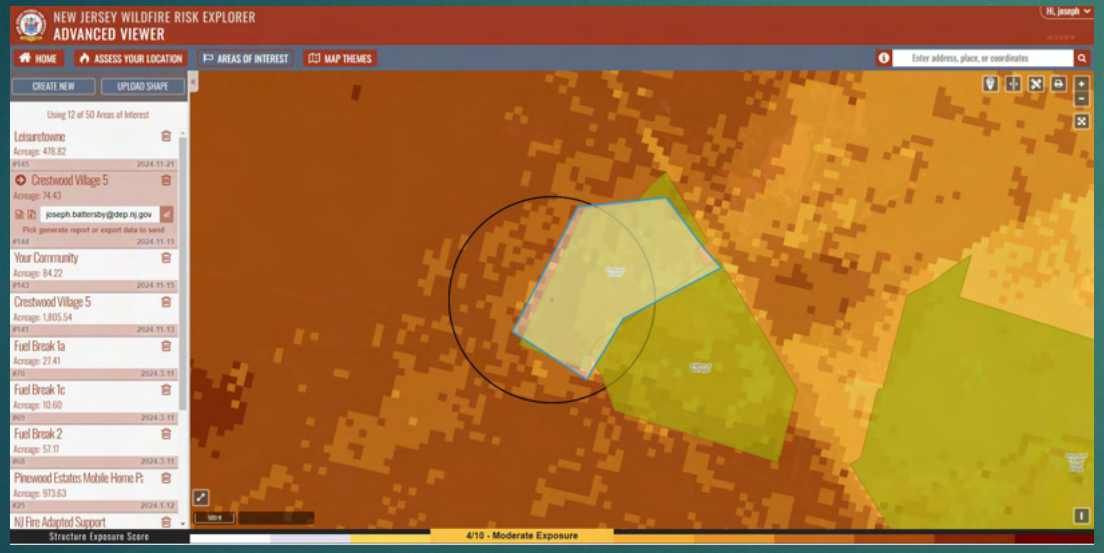
- Resources for residents, community leaders, and professionals
- Actions to help mitigate risk
- Map data layers developed by the nation's wildfire experts
- Access from any device
- Location-specific assessments
- Innovative tools for easy exploration of map data
- Custom report and data exports
- More NJFFS information tools

Visit NJWRAP at newjerseywildfirerisk.com

New Jersey Wildfire Risk Assessment Portal (NJWRAP) made possible by US Forest Service

NJ Risk Assessment

AOI – Toggle, Values at Risk, Risk to Structures, Burn Probability, Structure Exposure Score



Editable Summary Report

Introduction

New Jersey Area of Interest Report

The Area of Interest tool allows users of the Professional Viewer to define a specific area to further explore components of its wildfire risk. This report has been generated explicitly for your defined Area of Interest, providing a detailed summary of each data layer which makes up the assessment. The layers for many of these map products were created with publicly available datasets and information provided by the NJ Forest Fire Service. To access all data layers for this Area of Interest as a GIS file, use the tool's feature to "export data as a .zip file" after defining an area.

This report was designed so that information can be copied and pasted into other plans, reports, or documents depending on user needs.

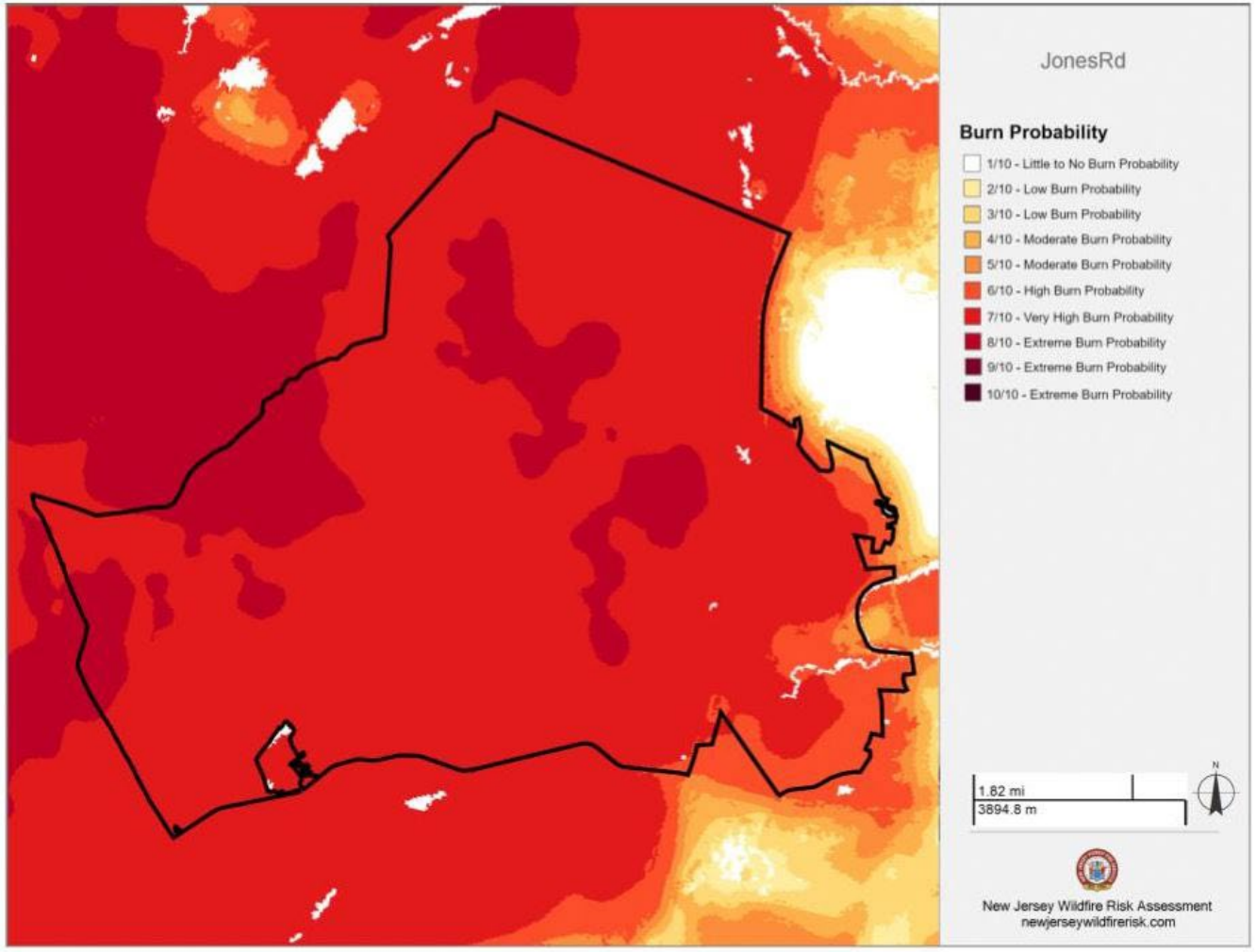
This report was designed so that information can be copied and pasted into other plans, reports, or documents depending on user needs. Examples include, but are not limited to Community Wildfire Protection Plans, Local Fire Plans, Fuels Mitigation Plans, Hazard Mitigation Plans, and Homeowner Risk Assessments.

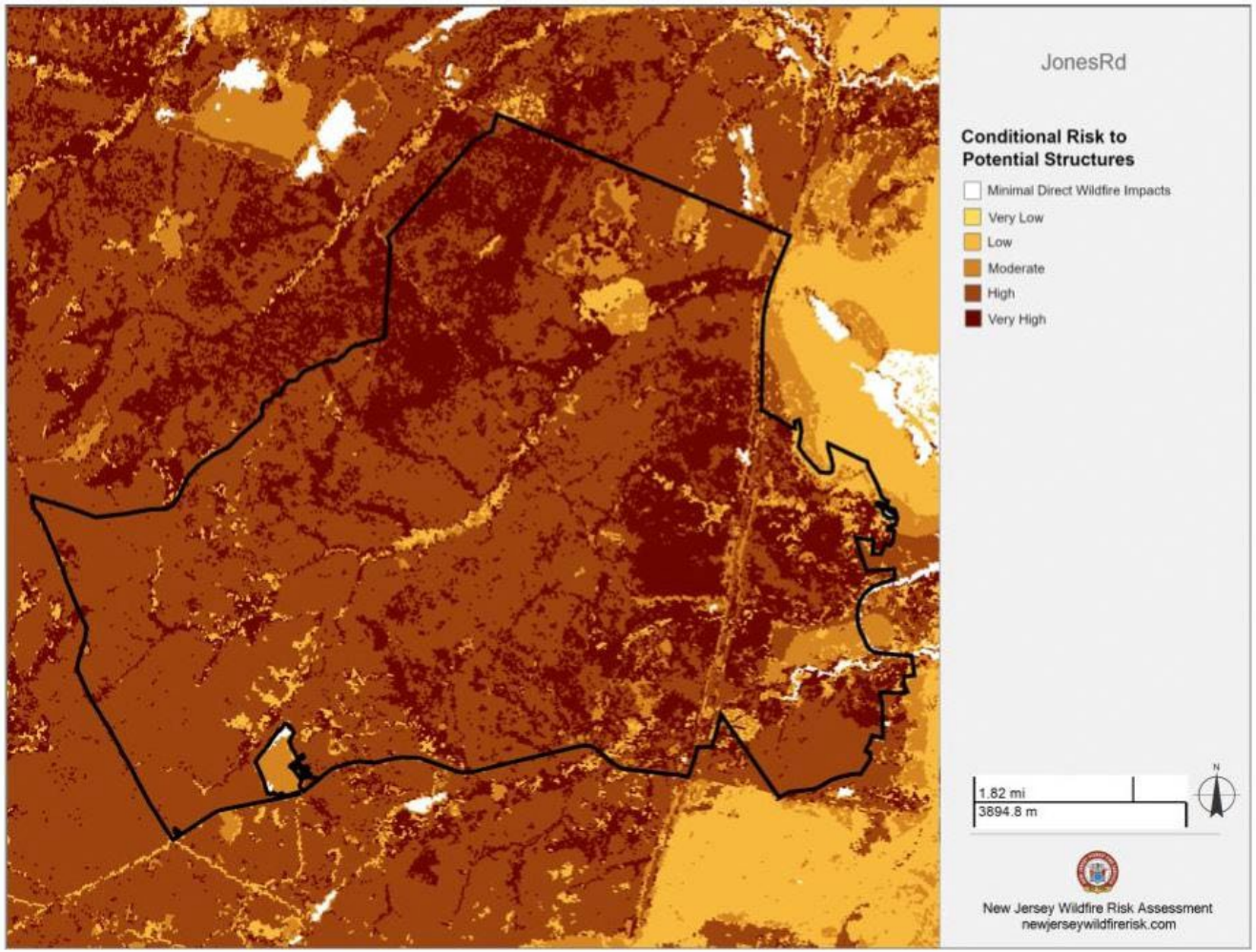
The New Jersey Wildfire Risk Assessment provides a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in the state of New Jersey.

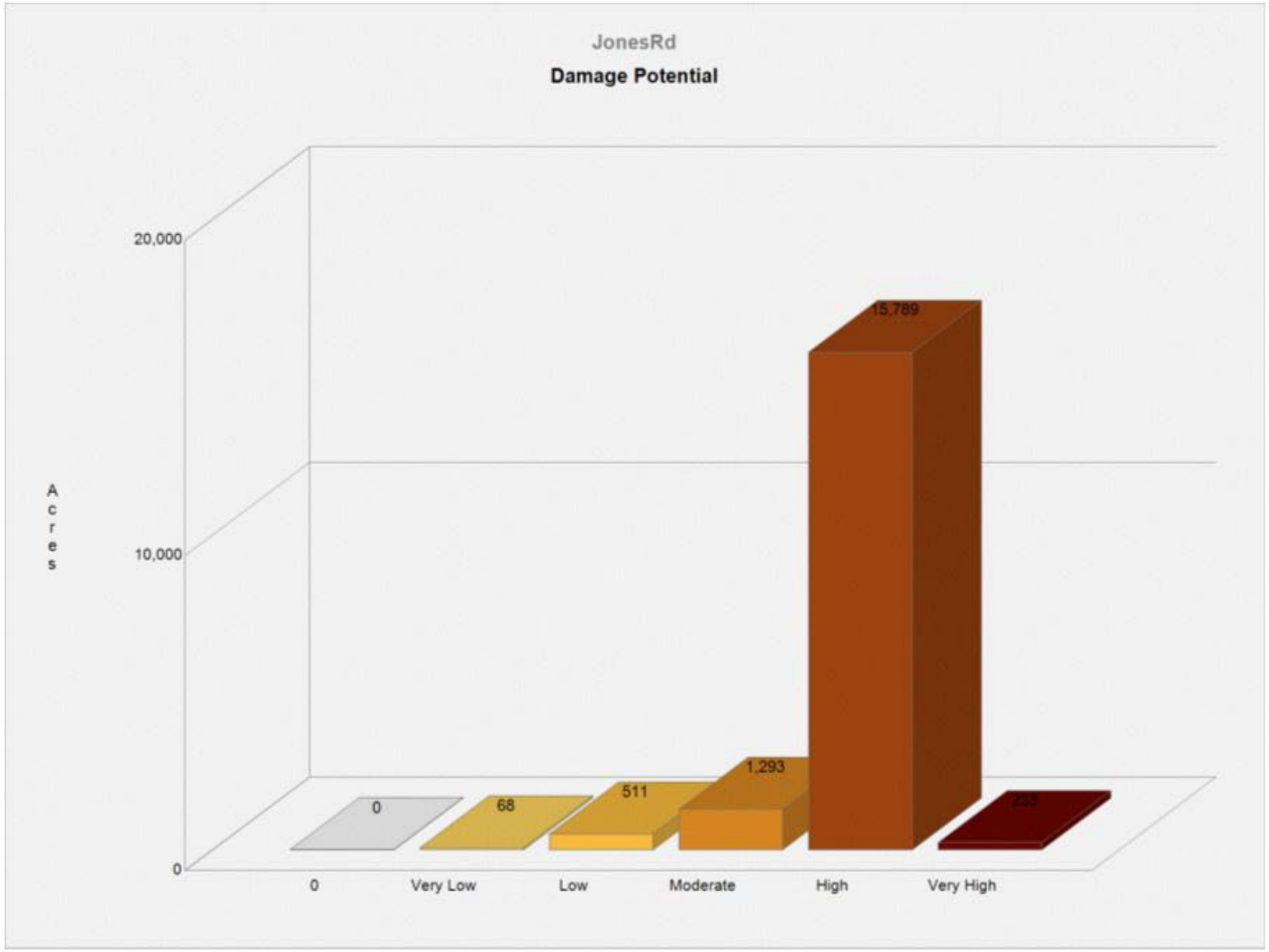
Results of an assessment can be used to help prioritize areas in the state where mitigation treatments, community interaction, education, or tactical analyses might be necessary to reduce risk from wildfires.

The New Jersey Wildfire Risk Explorer's map products and descriptions included in this summary report are designed to provide the information needed in support of the following key priorities:

- Identify areas that are most prone to wildfire.
- Plan and prioritize fuel treatments.
- Define priorities and improve emergency response across jurisdictional boundaries.
- Increase communication with residents to address community needs and priorities.
- Identify areas where additional tactical planning may be needed, especially regarding mitigation projects and Community Wildfire Protection Planning.
- Provide robust data to support resource, budget, and funding requests.
- Plan for response and wildfire suppression resource needs.


JonesRd
Burn Probability
1/10 - Little to No Burn Probability
2/10 - Low Burn Probability
3/10 - Low Burn Probability
4/10 - Moderate Burn Probability
5/10 - Moderate Burn Probability
6/10 - High Burn Probability
7/10 - Very High Burn Probability
8/10 - Extreme Burn Probability
9/10 - Extreme Burn Probability
10/10 - Extreme Burn Probability
1.82 mi
3894.8 m
N
New Jersey Wildfire Risk Assessment
newjerseywildfirerisk.com


JonesRd
Conditional Risk to Potential Structures
Minimal Direct Wildfire Impacts
Very Low
Low
Moderate
High
Very High
1.82 mi
3894.8 m
N
New Jersey Wildfire Risk Assessment
newjerseywildfirerisk.com


JonesRd
Damage Potential
20,000
10,000
0
Acres
0
68
511
1,293
15,789
233
0
Very Low
Low
Moderate
High
Very High


WELCOME

Moderate Hazard; a score of 70 to 99 indicates a High Hazard; and any score greater than 100 indicates an Extreme Hazard.

Many of the hazard assessment values were determined based on the proximity of homes to the forest. The community's homes were constructed very close to the edge of the forest and/or in close proximity to one another.

Photo 1

Photo 2
Typical for residences that border the densely wooded Common Grounds

This Street Assessment Summary was then color coded to a layout of the Community to identify areas of low to high ignition hazard.

Mapping of Community Hazard Assessment

Brown - high risk
Purple - moderate risk
Blue - low risk

FIREWISE USA
RESIDENTS REDUCING WILDFIRE RISKS

TIME AND EXPENSE INVESTMENT EXAMPLES

Investing the equivalent of one volunteer hour (valued at $25.43) per residential dwelling unit within the site's boundary in annual wildfire risk reduction efforts is a requirement of the national recognition program's criteria for maintaining an "In Good Standing" status. Examples of potential actions, activities, and expenses that can be used in meeting the total investment are listed below. These are only examples, it is not a comprehensive list.

COLLABORATION WITH FORESTRY, FIRE, AND RELATED EXPERTS:

- Consultation time with forestry/fire professionals on areas at risk
- Coordination of arborist, landscaping, etc. estimates for vegetation maintenance in common areas
- Regional coordinator's time mentoring/working with residents
- Time spent performing fire risk overviews at individual homes

COORDINATION OF PROJECTS, MEETINGS, ETC.:

- Coordination of wildfire related outreach events
- Coordination of wildfire educational presentations with subject matter experts
- Resident leader's program administration time
- Travel time to risk reduction meetings, orientations, trainings, and workshops

EDUCATION/TRAINING EVENTS AND MEETINGS FOR RESIDENTS:

- Attendance at evacuation/preparedness trainings
- Attendance at wildfire-related education/informational meetings and events
- Home improvements/modifications training
- Fire-resistant plant species workshop
- Safety and personal protective equipment training
- Vegetation management training

IMPROVEMENTS/MAINTENANCE ON THE HOME AND OUTBUILDINGS:

- Chimney spark arrestor installation
- Repairs to retrofit open-eaves style construction to soffited-eaves
- Modifications of deck to increase the gap between boards from ⅛ inch to ¼ inch
- Inspection of roof; replacement of shingles as needed
- Inspection/repairs of eaves and soffits to ensure construction materials are in good condition
- Removal all flammable materials from under decks and porches
- Removal of debris between deck board gaps/joints
- Removal of debris on the roof and in the gutters as needed
- Replacement of missing deck boards to reduce ember entry to area under decks
- Replacement of vinyl gutters with metal gutters
- Replacement of wood fencing sections where attached to the house with a noncombustible product
- Resident or contractor labor to perform ignition-resistant exterior improvements (e.g., new Class A roofs, mesh screening added to attic and crawl space vents, siding repairs, replacement of wood fencing attached to siding, etc.)
- Installation of weatherstripping along the perimeter of garage doors to help keep embers out
- Use of a sealant (such as caulking) to cover gaps in open-eave areas

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TIME AND EXPENSE INVESTMENT EXAMPLES (continued)

IMPROVEMENTS/MAINTENANCE WITHIN THE HOME IGNITION ZONES:

- Clearing of debris at the base of combustible fences
- Clearing of vegetation beneath and around large stationary propane tanks
- Creation of a permanent non-flammable footprint under large stationary propane tanks
- Creation of a non-flammable footprint under decks with gravel, stone or concrete
- Creation of small fuel breaks by adding hardscaping (e.g., driveways, walkways/paths, patios, stone walls, etc.)
- Delimbing and removal of lower tree branches
- Relocation of firewood piles to at least 30 feet from the home and other structures
- Mowing lawns and trimming native grasses and weeds as needed
- Raking and removal of pine needles, leaves, and ground debris
- Replacement of combustible mulch material with stone/gravel
- Replacement of highly-flammable vegetation with fire-resistant species
- Reduction of ladder fuels
- Stacking/piling of slash and other debris for chipping or curbside pickup
- Thinning or removal of trees

NEIGHBORHOOD/COMMUNITY FOCUSED PROJECTS:

- Debris removal and maintenance of commonly owned areas
- Coordination of rental equipment and contractors for community-wide wildfire risk reduction projects
- Door-to-door canvassing to get new neighbors involved in reducing wildfire risks
- Grant writing/oversight for wildfire risk reduction projects
- Mentoring adjacent neighborhoods on the importance of reducing wildfire risks
- Organizing, coordinating, planning, and implementation of the annual education/outreach events/activities
- Participation and attendance at Firewise board meetings, including development and updating of action plans
- Participation in group risk reduction activities for residents physically unable to do the work themselves
- Participation in national Wildfire Community Preparedness Day projects
- Reduction of vegetation/fuels from adjacent ingress and egress routes
- Resident's time attending/participating in annual wildfire education/outreach events
- Participation in risk reduction orientation to new residents
- Writing wildfire educational articles for the neighborhood newsletter or community website

EXPENSE EXAMPLES:

- Chipper/power equipment rental/purchases, fuel, oil, and repair costs
- Chipper/power equipment associated costs: fuel and oil
- Chipper/power equipment maintenance/repair costs
- Contractor/labor expenses to perform risk reduction work (e.g., arborists, landscapers, professional forester services, roofers, etc.)
- Costs for community-wide clean up days (e.g., dumpster rental, compostable leaf/lawn bags, etc.)
- Costs to replace flammable mulch materials with stone/gravel

Firewise Community Plan

For

Greenbriar Woodlands

Toms River, Ocean County, New Jersey
2022

Prepared by:

Greenbriar Woodlands Firewise Committee

Greenbriar Woodlands HOA
1 Kensington Boulevard
Toms River, NJ 08755
(732) 286-6888

6- Committee Actions

2022

1- CAB approval for Firewise project

2- Create Firewise portal, submit documentation

3- Schedule Community awareness meeting

4- Form/organize Firewise committee

5- Community awareness/training

6- Defensible space pilot project

7- Firewise awareness day for the community residents.

2023

1- Firewise Clean Up day for community

2- Community awareness/training

3- Defensible space project

4- Firewise awareness day for the community


If pulled over by an unmarked car & you're skeptical of officer...


Appendix B NJ Wildfire Risk Reduction RFP 2017
BRIGHTON at BARNEGAT
GROVE FIRE FORCES BRIGHTON
EVACUATION


NEW JERSEY FOREST FIRE SERVICE
EST. 1906
Crestwood Village 6
This map shows both Crossley Preserve and Whiting Wildlife Management Areas that are treated with RXB.
Legend
1.9 Acre Block
RXB Treated Area
Swamp land
N

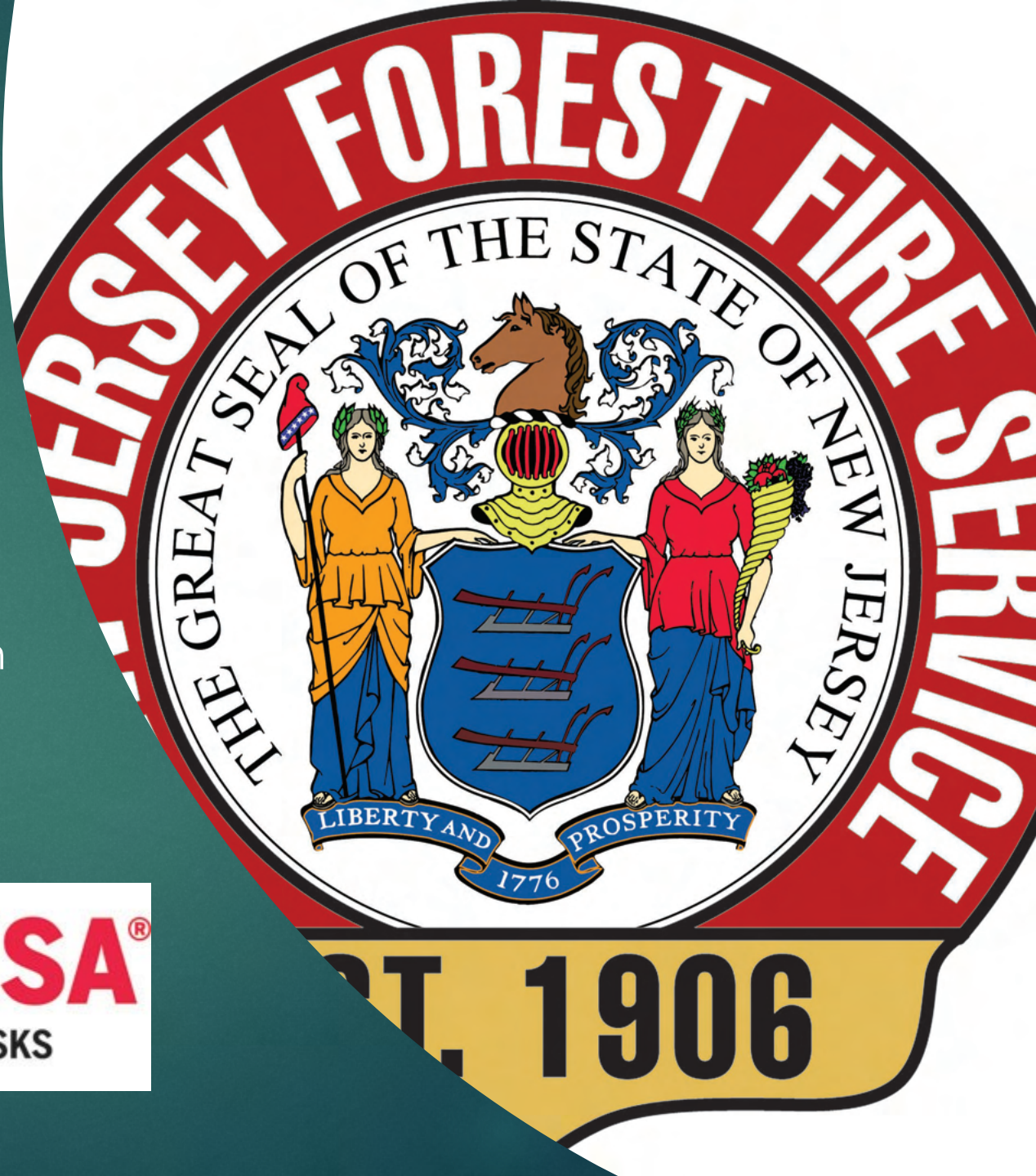
- [ ] Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers
- [ ] Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration
- [ ] Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening
- [ ] Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers
- [ ] Repair or replace damaged or loose window screens and any broken windows
- [ ] Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating

Firewise in Action


Vermeer

Additional Community Resources

- njwildfire.org
  - RxB dashboard
  - Conditions Dashboard
  - Facebook and Twitter
- nfpa.org - Firewise
- Wildfire Risk Reduction Grant Application
- CWDG
- Outside grants



NFPA

FIREWISE USA®

RESIDENTS REDUCING WILDFIRE RISKS

RUTGERS UNIVERSITY
Water Resources Program
New Jersey Agricultural Experiment Station

GREEN INFRASTRUCTURE PLANNING

PRESENTED AT A LEAGUE OF MUNICIPALITIES MEETING
ATLANTIC CITY, NJ
ON NOVEMBER 20, 2025

CHRISTOPHER C. OBROPTA, PH.D., P.E.

OBROPTA@RUTGERS.EDU

WWW.WATER.RUTGERS.EDU

Tier 1 Impervious Cover Assessment

Locate and quantify impervious surfaces, and the runoff volumes associated with these surfaces. **[5 points]**

Tier 2 Green Infrastructure Action Plan

Complete requirements of Tier 1, plus identify immediate and short-term (i.e., < 5 years) green infrastructure projects to manage stormwater runoff from impervious surfaces. **[5 points]**

Tier 3 Green Infrastructure Strategic Plan

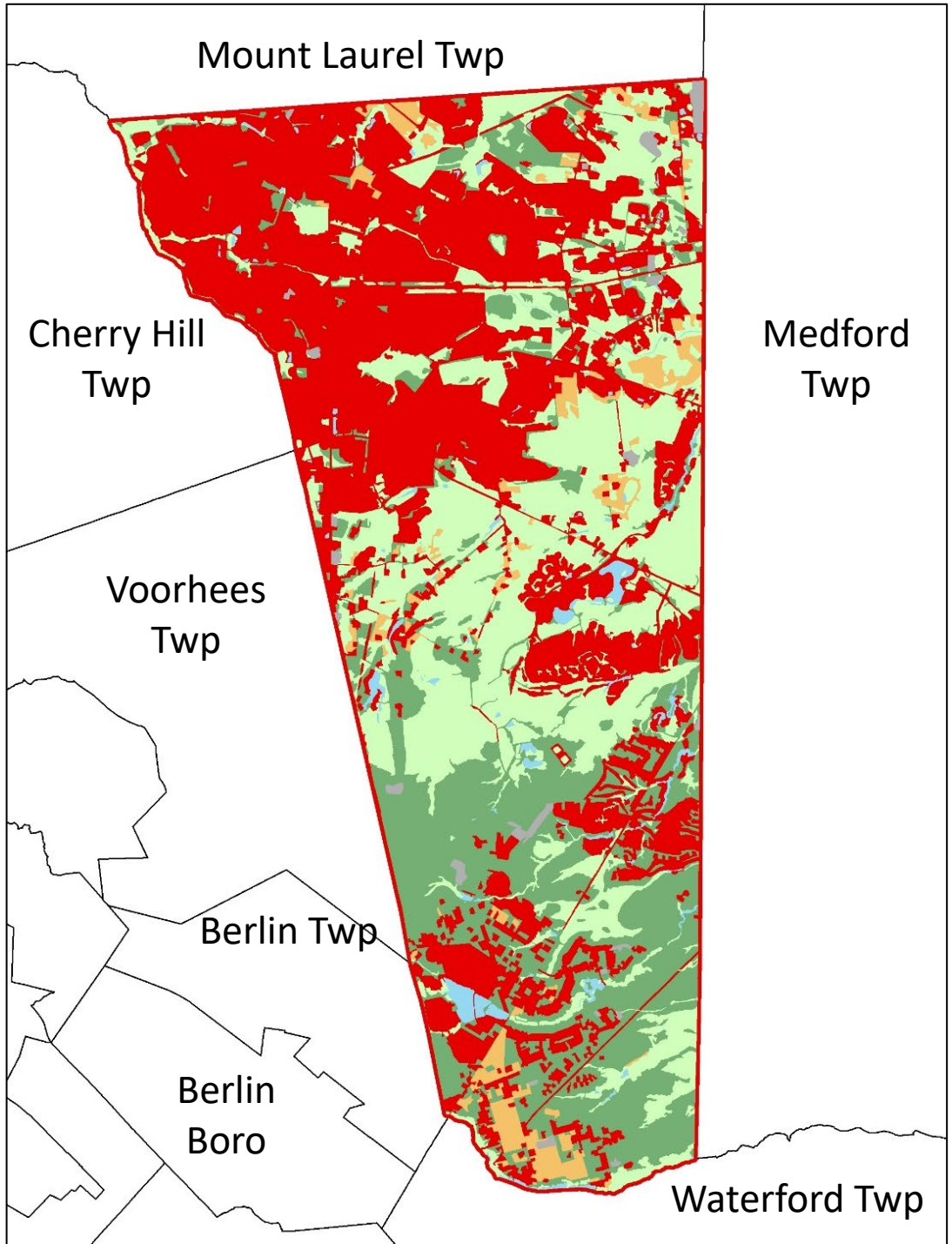
Complete requirements of Tiers 1 and 2, plus identify long-term (i.e., 5-20 years) green infrastructure projects and policy recommendations for community-wide green infrastructure implementation. **[10 points]**

Impervious Cover Assessment (ICA)

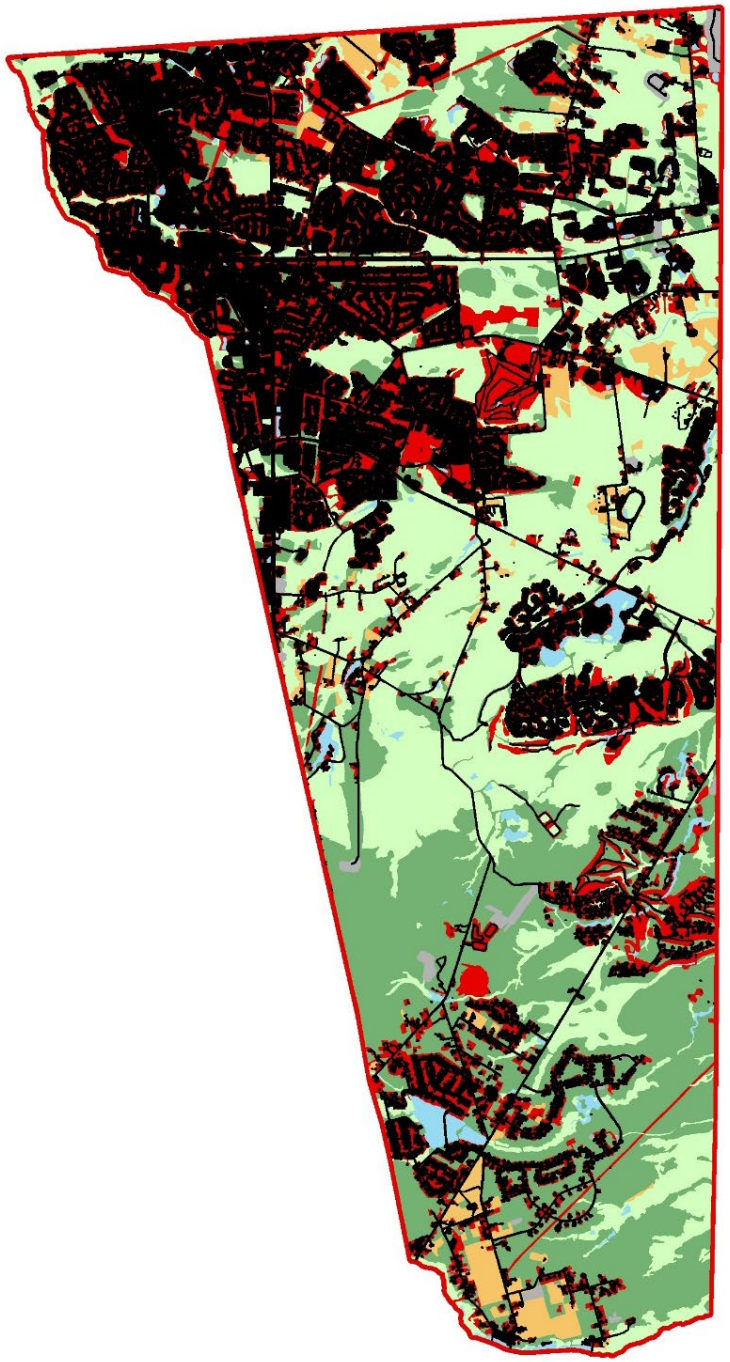
Impervious Cover Assessment

- Analysis completed by watershed and by municipality
- Use 2015 Impervious Surface Layer
- Calculate runoff volumes for water quality, 2-, 10- and 100-year design storm and annual rainfall
- Contains three concept designs

Evesham Township Land Use Map



- AGRICULTURE
- BARREN LAND
- FOREST
- URBAN
- WATER
- WETLANDS



Evesham Township Impervious Surface Map (2015 GIS Layer)

18.4% Impervious Cover

Watershed	Total Area (ac)	Impervious Cover (ac)	%
Alquatka Branch	1,026.8	32.23	3.1%
Barton Run	5,669.5	634.13	11.2%
Cooper River	415.0	195.6	47.1%
Kettle Run	1,509.0	155.53	10.3%
Lake Pine	2,857.2	267.26	9.4%
Mullica River	383.2	29.3	7.6%
Pennsauken Creek	2,951.5	1148.54	38.9%
Rancocas Creek	4,116.9	1020.69	24.8%
Total	18,929.1	3,483.3	18.4%

Subwatershed	NJ Water Quality Storm (MGal)	2-Year Design Storm (3.36″) (MGal)	10-Year Design Storm (5.18″) (MGal)	100-Year Design Storm (8.81″) (MGal)	Annual Rainfall of 46.3" (MGal)
Alquatka Branch	1.09	2.94	4.53	7.71	40.52
Barton Run	21.52	57.85	89.19	151.69	797.20
Cooper River	6.64	17.84	27.51	46.79	245.90
Kettle Run	5.28	14.19	21.88	37.20	195.53
Lake Pine	9.07	24.38	37.59	63.93	335.99
Mullica River	0.99	2.67	4.12	7.01	36.83
Pennsauken Creek	38.98	104.78	161.54	274.75	1,443.89
Rancocas Creek	34.64	93.12	143.56	244.16	1,283.17
Total	**118.22**	**317.79**	**489.92**	**833.25**	**4,379.05**

GREEN INFRASTRUCTURE ACTION

CURRENT CONDITION

CONCEPT DESIGN

CURRENT CONDITION

CONCEPT DESIGN

Green Infrastructure Action Plan

ICA (Tier1) + the following:

1. Community engagement
2. Potential green infrastructure sites
3. Site level analysis including concept plans, information sheets, and project costs
4. Investment/funding strategy for green infrastructure projects
5. Short-term 5-year goal

1. Community Engagement

2. Identifying Watershed Improvement Projects

We Look Here First

- ✓Schools
- ✓Places of Worship
- ✓Libraries
- ✓Municipal Building
- ✓Public Works
- ✓Firehouses
- ✓Post Offices
- ✓Elks or Moose Lodge
- ✓Parks/ Recreational Fields

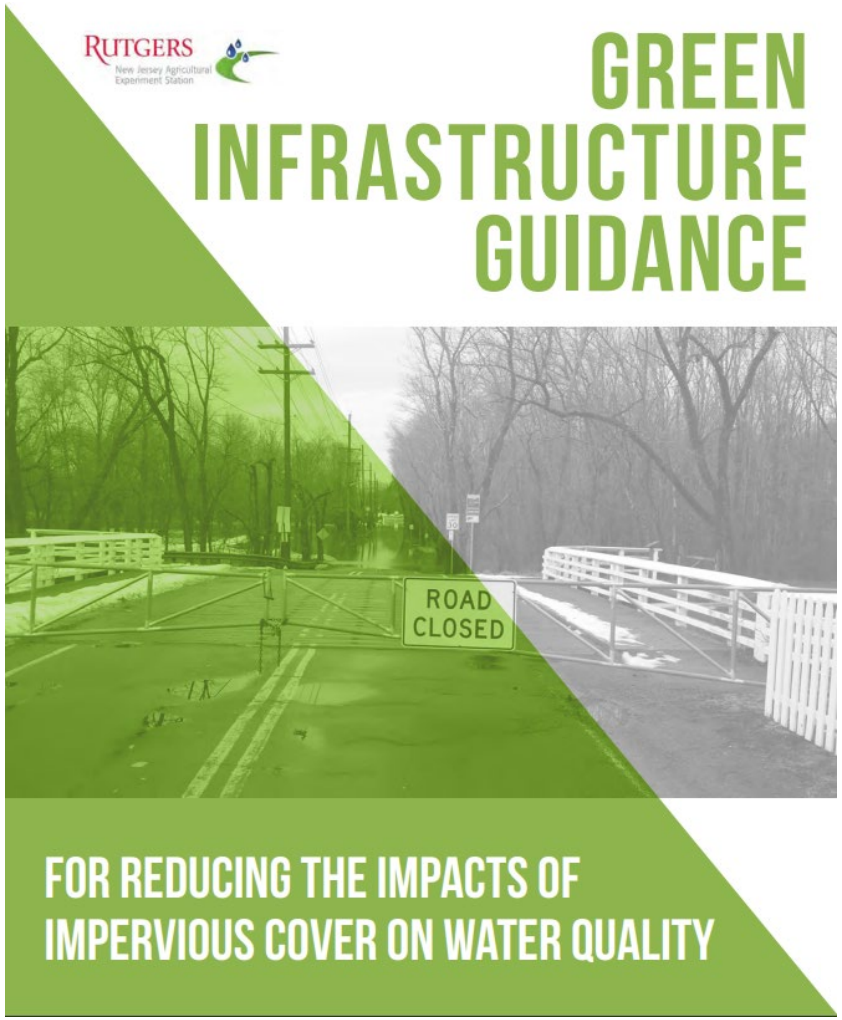
Or you can identify tax exempt parcels:

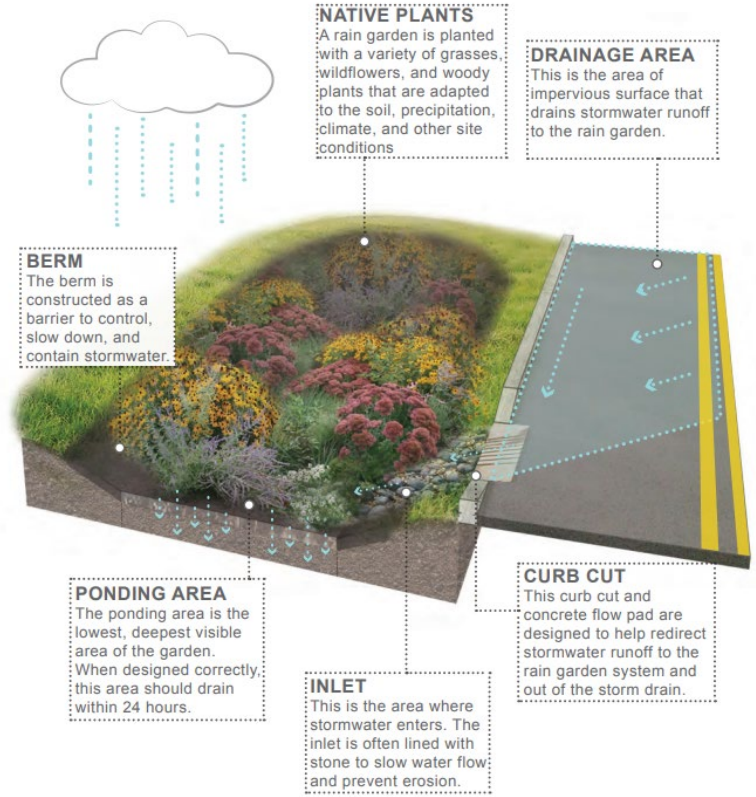
Tax Exempt Property Class Codes for NJ:

- 15A Public School Property
- 15B Other School Property
- 15C Public Property
- 15D Church & Charitable Propert
- 15E Cemeteries & Graveyards
- 15F Other Exempt

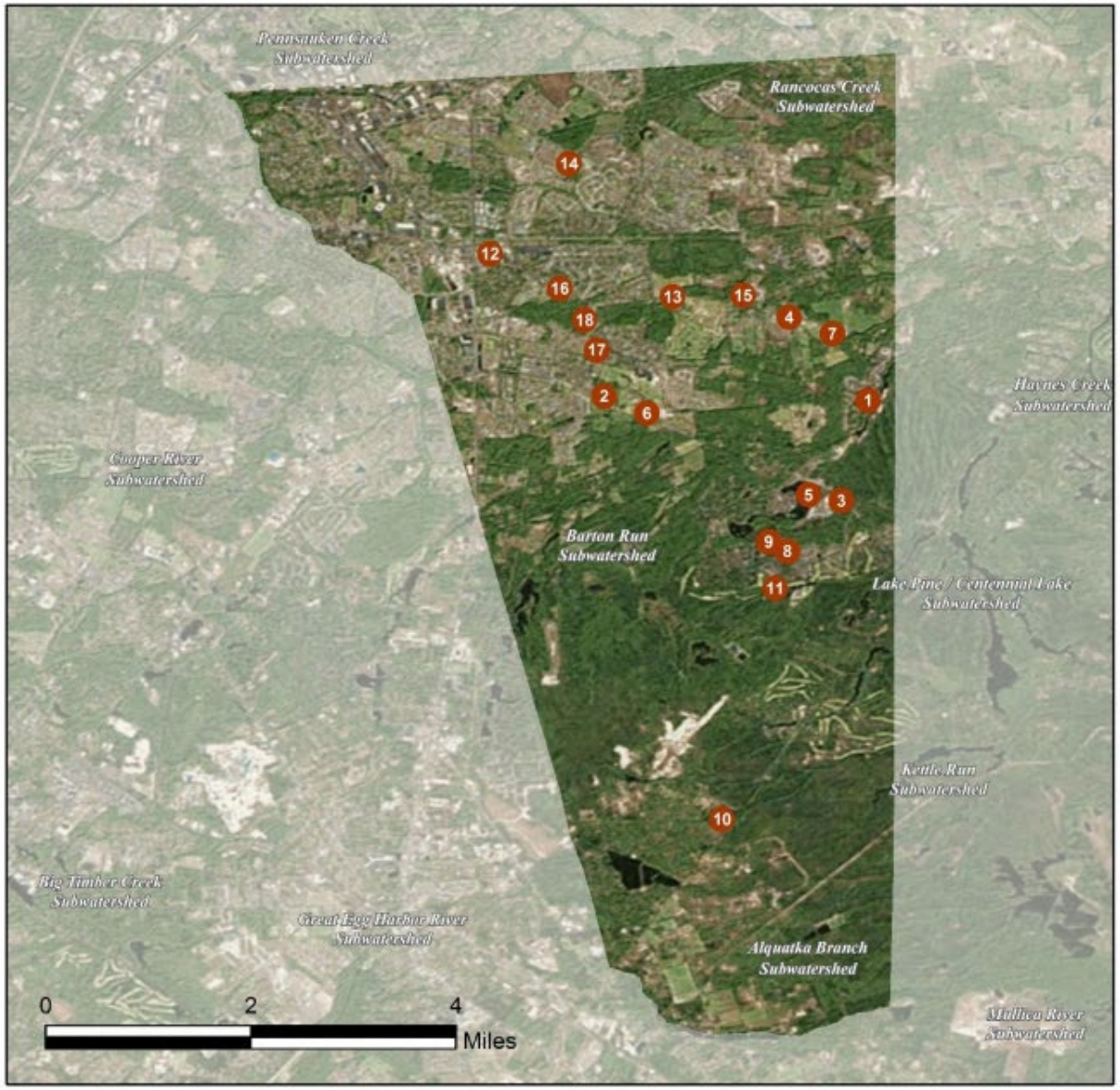
Green Infrastructure Brochure:

http://water.rutgers.edu/Green_Infrastructure_Guidance_Manual/GI-Brochure_PRINT-FRIENDLY.pdf





EVESHAM TOWNSHIP: GREEN INFRASTRUCTURE SITES



SITES WITHIN THE BARTON RUN SUBWATERSHED:

1. Barton Run Swim Club
2. Cherokee High School
3. Evesham Fire/Rescue 223/227
4. Evesham Township Municipal Court
5. King's Grant Community Room
6. Marlton Elementary School
7. Memorial Park
8. Richard L. Rice Elementary School
9. Villa Royal Association

SITES WITHIN THE LAKE PINE SUBWATERSHED:

10. Kettle Run Fire/Rescue 225/228
11. Links Golf Course

SITES WITHIN THE PENNSAUKEN CREEK SUBWATERSHED:

12. Evesham Fire/Rescue 221/229

SITES WITHIN THE RANCOCAS CREEK SUBWATERSHED:

13. Christ Presbyterian Church
14. Frances S. DeMasi Elementary School
15. Marlton Assembly of God
16. Marlton Post Office
17. Robert B. Jaggard Elementary School
18. St. Joan of Arc Parish and School

Short term (5 years) goal

Existing Municipal Impervious Cover	Recommended Short Term (less than 5 years) Impervious Cover Management Goal (%)	Recommended Short Term Impervious Cover Management Goal (acres)
0% to 10%	1%	10 acres
10.1% to 25% **18.4%**	2%	15 acres
>25%	5%	20 acres

For Evesham, 2% of IC is 69.7 acres.

GREEN INFRASTRUCTURE STRATEGIC PLAN

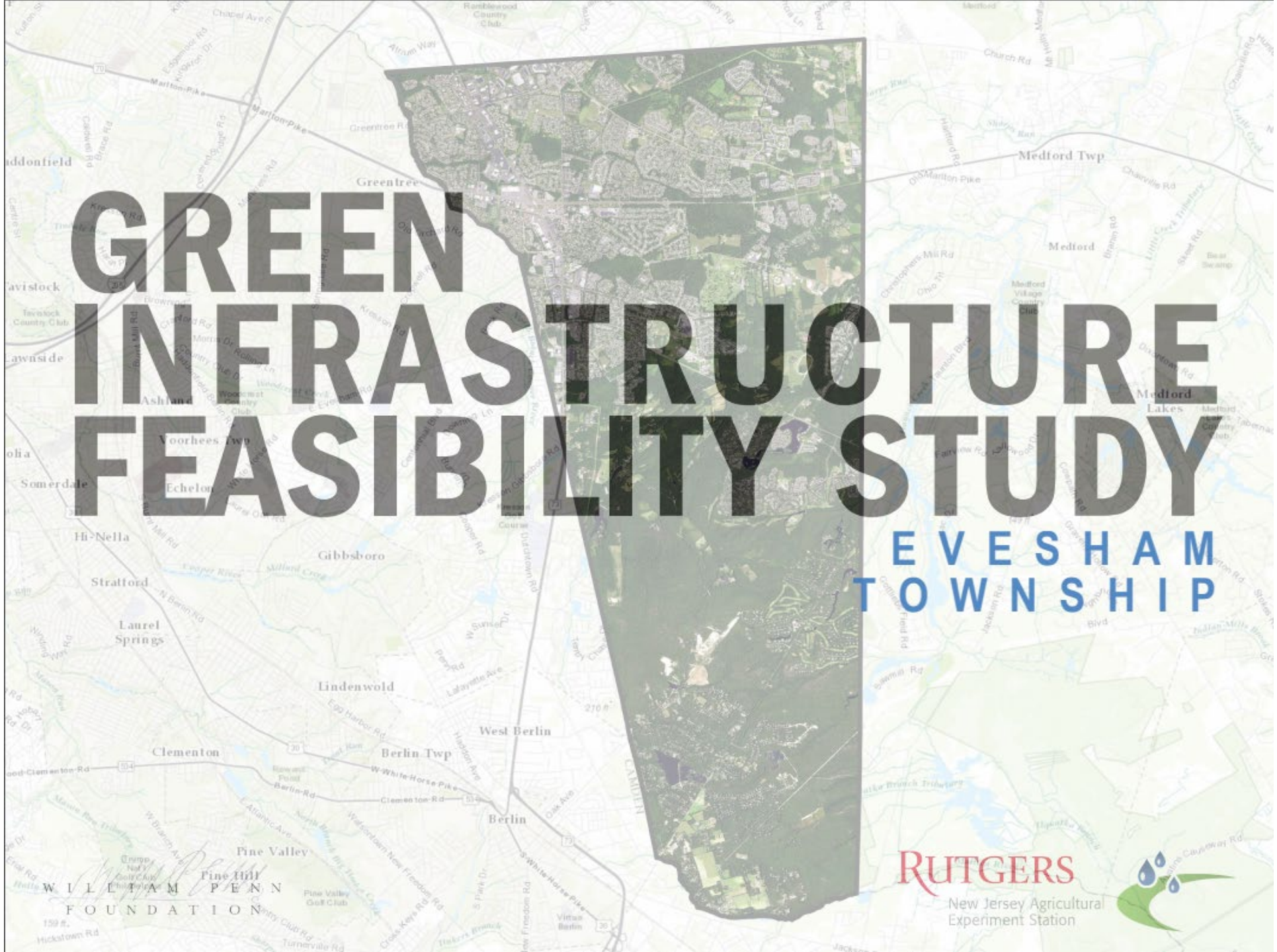
CURRENT CONDITION

CONCEPT DESIGN

Green Infrastructure Strategic Plan

ICA (Tier 1) and Green Infrastructure Action Plan (Tier 2) + the following:

- Additional green infrastructure sites
- Policy recommendations
- Water quality and quantify benefits
- Implementation agenda
- Long-term 5-20 year goals

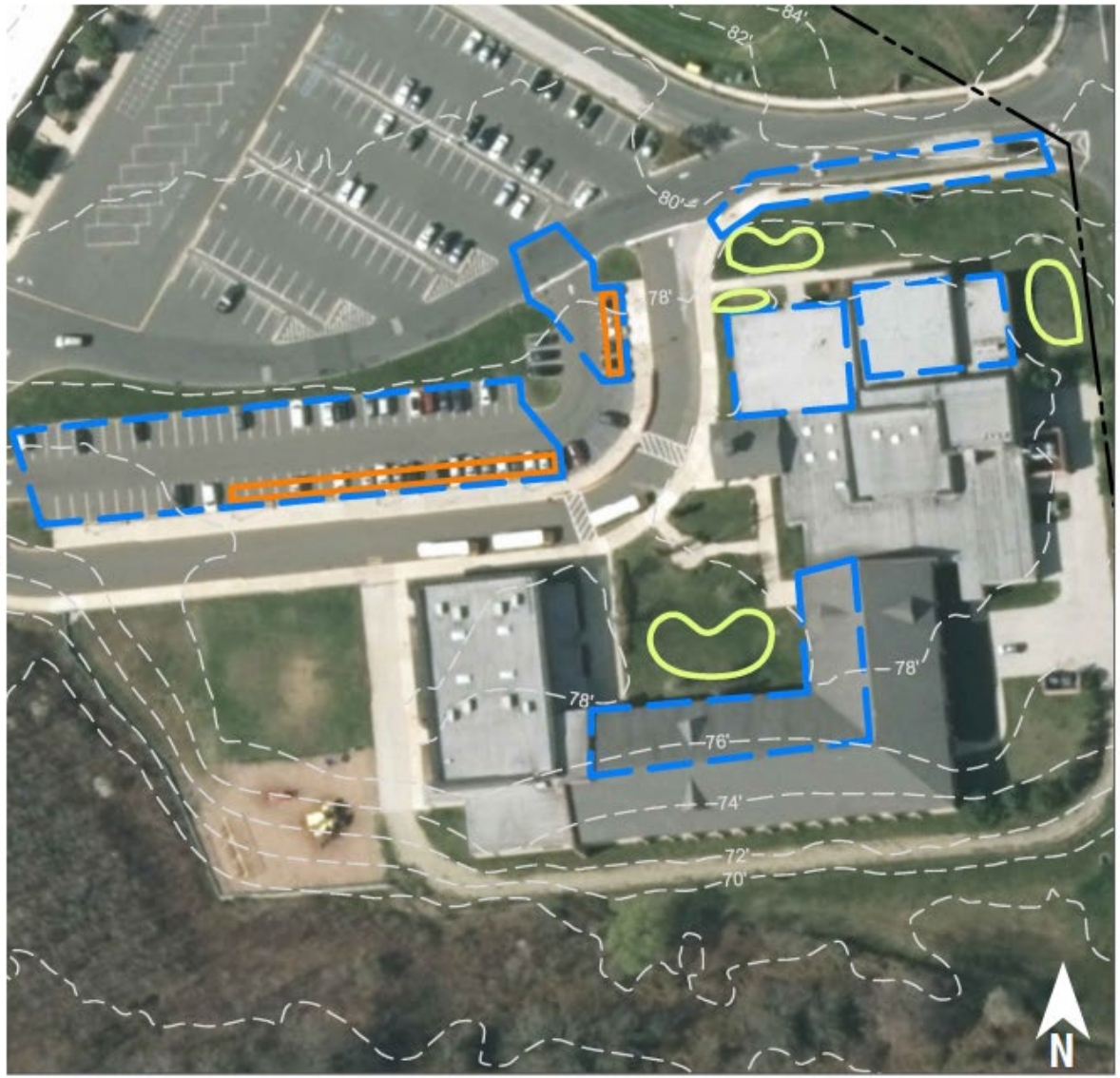


GREEN INFRASTRUCTURE FEASIBILITY STUDY

EVESHAM TOWNSHIP

WILLIAM PENN FOUNDATION

RUTGERS
New Jersey Agricultural Experiment Station



- bioretention system
- pervious pavement
- drainage area
- property line
- 2015 Aerial: NJOIT, OGIS

0' 50' 100'

MARLTON ELEMENTARY SCHOOL

190 Tomlinson Mill Road
Evesham, NJ 08053

Long term (5 to 20 years) goal

Existing Municipal Impervious Cover	Recommended Long Term (5 to 20 years) Impervious Cover Management Goal (%)	Recommended Long Term Impervious Cover Management Goal (acres)
0% to 10%	2%	25 acres
10.1% to 25%	5%	50 acres
>25%	10%	80 acres

For Evesham, 5% of IC is 174.2 acres.

Green Infrastructure Implementation

Tier 1 Implement Green Infrastructure Demonstration Projects. Complete two green infrastructure demonstration projects and/or implement one green infrastructure policy. Green infrastructure projects include one or more of the green infrastructure practices shown in the Green Infrastructure Guidance Manual for New Jersey: Rain Gardens, Bioswales, Downspout Planters, Stormwater Planters, Cisterns, Permeable Pavements, Tree Filter Boxes, and Green Roofs. Tier 1 replaces both the previous Green Roofs and Rain Gardens Actions in the Innovation & Demonstration Projects category. **[10 points]**

Tier 2 Implement Green Infrastructure Action Plan. Complete as many green infrastructure projects as is necessary to achieve 50% of the short-term impervious cover management goal identified in the community's Green Infrastructure Action Plan (see the Green Infrastructure Planning Action). **[15 points]**

Tier 3 Implement Green Infrastructure Strategic Plan. Complete as many green infrastructure projects and policy changes as is necessary to achieve 50% of the long-term impervious cover management goal identified in municipality's Green Infrastructure Strategic Plan (see the Green Infrastructure Planning Action). **[20 points]**


ECKŌ