WASHINGTON TOWNSHIP

Burlington County

COMMUNITY WILDFIRE PROTECTION PLAN

An Action Plan for Wildfire Mitigation 2011-2021



Community Wildfire Protection Plan

Executive Summary

The intent of this plan is to encourage the municipality and its residents to:

- 1. Recognize their responsibility to protect themselves and their property from wildfires.
- 2. Determine and prioritize fire protection options available.
- 3. Implement the selected methods to reduce exposure to the threat of wildfire.

The NJ Forest Fire Service and the Local Emergency Planning Council (LEPC) of Washington Township (CWPP team) completed a comprehensive review of the Township's wildfire fighting capabilities, fire risk, fuel hazard classifications and past fire occurrences. Evaluating these factors and others that contribute to wildfire risk in a spatial format allowed the team to develop a cooperative plan targeting specific issues requiring action. The CWPP is designed to be a working document available for modification when warranted and the efforts and priorities that are identified can be changed, rearranged added to or dropped depending on current needs.

The municipality is committed to implementing the listed priority projects within the review period of this plan, and will reassess and renew this process to continue to reduce the severity and threat from wildfires.

The State Hazard Mitigation Plan, required by the Federal Emergency Management Agency under the Stafford Act, directs that a CWPP will be developed for all Municipalities within the wildland/urban interface within NJ. The Stafford Act requires states to provide all-hazard mitigation planning, including wildfires, with the State of NJ focusing these all-hazard plans at the county level. From single homeowners or neighborhood support of Firewise concepts, municipal CWPP infrastructure planning, property maintenance codes, and other efforts, to all-risk hazard planning at the county and state levels, a continuum of methods to protect the citizens of NJ will be developed that can reduce the damage and risk of wildland fires.

This Community Wildfire Protection Plan was developed through an initiative by the New Jersey Forest Fire Service and funded by a grant provided by the US Forest Service.

This Community Wildfire Protection Plan was adopted by Washington Township on December 13, 2011 and will be reviewed and updated every 10 years or sooner if changes are needed prior to the 10-year expiration date of the

plan.





Stakeholders

The following plan is a collaborative effort between various entities. The representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plan's contents.

Community Representative(s):

NameBarbara L. Somes, OEM CoordinatorAddress12 Turtle Creek Road, Egg Harbor City, NJ 08215Phone Number609.965.2603Other Contact Information609.965.1601

<u>Name</u>

Horace Somes, Jr., Deputy OEM Coordinator

Address 12 Turtle Creek Road, Egg Harbor City, NJ 08215

Phone Number 609.965.2603

Other Contact Information hsomes@wtbcnj.org

Name Brian Detrick, Assistant OEM Coordinator

Address 8 Turtle Creek Road, Egg Harbor City, NJ 08215

Phone Number 609.965.2129

Other Contact Information

Local Fire Department:

Name Leonard Forand Jr., Chief, Green Bank Fire Co. 451

Address 1683 Route 542, Egg Harbor City, NJ 08215

Phone Number 609.965.4743

Other Contact Information

Name Michael Alexander , Chief, Lower Bank Fire Co. 452

Address 2133 River Road, Egg Harbor City, 08215

Phone Number 609.965.0640

Other Contact Information

NJ Forest Fire Service : Name Shawn Judy, Section Firewarden B2

Address PO Box 239, New Lisbon, NJ 08064

Phone Number 609.726.9010

Other Contact Information Fax: 609.726.1624, 609.209.2474

Name Greg McLaughlin

Address PO Box 404 501 East State Street, Trenton NJ, 08625-0404

Page 3

Phone Number 732.833.4847

Other Contact Information Cell: 609.649.3611

The following federal, state and other interested parties were consulted and involved in the preparation of this report.

Name	Organization
Maureen Brooks	USDA-FS, Community Fire Planner
David Kutner	NJ Pinelands Commission, Director of Special Programs
Vincent Turner	US Department of Interior-Fish and Wildlife Service
Robert Auermuller	Superintendent, Wharton State Forest

Washington Township

Washington Township is the largest rural community in southern Burlington County and in New Jersey. It covers a total of 107 square miles 100% within the Pinelands Preservation Area and includes the largest blueberry/cranberry farming community in NJ. While the permanent resident numbers remain small the visiting population due to ample outdoor activities associated with Wharton State Forest is large (thousands of seasonal visitors camping, hiking and boating on the public lands). The population of Washington Township is 650 residents (2010 census). The southern border is the Mullica River with Atlantic County lying on the southern bank of the Mullica River. 85% of the land area in Washington Township is State owned Forest, (Wharton and Penn State Forests) or Fish and Wildlife Management Area (Swan Bay).

Some interesting facts about Washington Township:

- There are three private campgrounds in the Township that when filled to capacity (700 sites) the population of the campgrounds exceeds the number of permanent residents in Washington Township.
- There are two principal County Highways; Route 563 (North/South); Route 542 (East/ West).



TABLE of CONTENTS

Content <u>Page</u> Executive Summary 2 Stakeholders, (names, addresses, contact information) 3 Index to maps 5 Fire History 6 Goals and Objectives 8 Municipal Hazard and Risk Assessment 9 Fuel Hazard Mitigation Options 10 Options to Reduce Structure Ignitability 11-13 Outreach Options 14 Implementation Strategy and Action Plan 15 Community Wildfire Protection Plan Certification and Agreement 16 Project Completion Checklist 17 Maps Figure Page

Fuel Hazard		2	16
Wildfire Risk	3	17	
Wildfire Origins (1924-2007)	4	18	
Road Infrastructure	5	19	
Water Infrastructure		6	20
Property Ownership		7	21
Hazard Reduction for Fire Lane	Projects	8	22
Major Wildfire History (1925-20	11)	9	23
Emergency Services Locations	10	24	
Prescribed Burning (1990-2010	11	25	
Paths of Large Fires (1925- Present)		12	26
Wildfire Hazard Areas		13	27
<u>Tables</u>	Content		<u>Page</u>
1	Municipal Hazard and Risk Assessment		8
2 Fuel Hazard Mitigation Opti		ons	9
3 Options to Reduce Structu		e Ignitability	10
4	Implementation Strategy an	d Action Plan	12

Community Base Maps

Included in the Community Wildfire Protection Plan is a series of maps highlighting specific data collected and analyzed by the NJ Forest Fire Service as well as maps depicting infrastructure and ongoing and planned future mitigation efforts.

<u>Figure</u>	<u>Map</u>	Notes
2	Fuel Hazard	This figure depicts forest fuel ratings that determine the ease of ignition and resistance to control efforts.
3	Wildfire Risk	This figure depicts areas where a fire risk is greatest due to human activity (causative agent)
4	Wildfire Origins (1924-2007)	This figure depicts the locations of known fire origins within Washington Township.
5	Road Infrastructure	This figure depicts major roadways and the location of Secondary Access Roads.
6	Water Infrastructure	This figure depicts the extent and location of water- ways ,rivers and streams.
7	Property Ownership	This figure shows the different types and extent of property ownership.
8	Hazard Reduction for Fire Lane Projects	This figure depicts the location of fire-lane projects for fuel reduction and fire mitigation, planned and/or in progress.
9	History of Major Wildfires (1925-2011)	This figure depicts the location and size of past Wildfires (>100 acres).
10	Emergency Services Locations	This figure depicts the location of Police, Medical Emer- gency Services and Fire Companies; and Facilities for Emergency Operations Centers and Headquarters. for major incidents.
11	Prescribed Burning History 1990-2010	This figure depicts the extent of prescribed burning pro- jects, planned or in progress.
12	Paths of Larger Fires (1925-Present)	This figure depicts the paths and some origins of fires as they traveled into, through, or threatened Washington Township.
13	Wildfire Hazard Areas	This figure depicts strategic planning areas of high and moderate hazard based upon fuel danger, existing fire- lanes, fuel-breaks and hazard reduction through prescribed burning.

Goals and Objectives of the Community Wildfire Protection Plan:

- I. Collaborate in the development of the plan with applicable local, county and state agencies.
 - Open community debate regarding wildfire threats and mitigation options
- Integrate wildfire protection into other federal, state, county and local planning initiatives
- II. Assess the Wildfire Hazards and Risks within the forested and wild-land urban interface areas of the community.
 - Estimate the likelihood and severity of a wildfire, and the impact to neighborhoods, structures or areas of concern.
 - Perform a comprehensive assessment of municipal infrastructure to ensure it is geared to support wildfire defense including;
 - A Roadway heights and widths
 - Orall Bridge weight limits
 - ◊ Street identification signing
 - Output A Hydrants or other water sources
 - Interoperable emergency communication networks
 - ♦ Fire-wise parks and open space
- III. Identify areas requiring hazardous fuels reduction and recommend types and methods of treatments that will protect one or more communities at risk and essential infrastructure.
 - Coordinate with fuel reduction initiatives sponsored by State, State Authorities or other local governments
 - Merge the goals and objectives of the landowners (public and private) with the needs and expectations of the community regarding reduction of wildfire hazards and risks
- IV. Identify and recommend measures that homeowners and communities can take to reduce the ignitability of homes and structures throughout the community.
 - Coordinate fire protection strategies across property/municipal boundaries
 - Foster the recognition by homeowners of their responsibility to protect their homes from wildfire
 - Address the issue of builders/developers responsibility regarding fuel-break installation.
 - ♦ Timing for completing work
 - ◊ Attaching fuel-break work to bonding of infrastructure
 - Determine municipal department/positions responsible for implementing
 - Address fuelbreak effectiveness for individual properties adjoining high hazard areas and "no-mow" environmental restrictions along highways.
- V. Increase individual and community awareness of wildfire hazards, risks and related issues as well as promote wildfire mitigation and community protection initiatives.
 - Provide for an educational component to remind residents of their responsibility to adopt concepts such as defensible space
 - Integrate and support neighborhood Firewise Communities goals
- VI. Prioritize hazardous fuel reduction, structural ignitability reduction, and community awareness projects within the community and assist in their implementation.
 - Coordinate grant funding with local, county and state government program budgets to achieve the most effective results with available funding
 - Use as a mechanism for the municipality to focus land use, development, building codes and property maintenance ordinances to enhance opportunities for existing homes and safer future development.



Washington Township Wildfire Origins

Municipal Hazard & Risk Assessment

A thorough assessment of historic wildfire occurrence, fire suppression capabilities and ranking of the survivability of a community, structure or area at risk of a wildfire was undertaken for the municipality. The following summary table identifies the associated wildfire hazards and risk as viewed by this municipality for the communities, structures or areas listed.

Community, structure or area at risk	Fuel Hazard	Risk of Wild- fire Occur- rence	Structural Ignitability	Firefighting capability	Overall Threat
Green Bank	High- Moderate	Moderate	High- Moderate	Moderate	High
Lower Bank	High- Moderate	High- Moderate	High- Moderate	Moderate	High
Wading River	High- Moderate	Moderate	High- Moderate	Moderate	High
Jenkins	High	High	High- Moderate	Low	High
Hog Wallow	High- Moderate	Moderate	Moderate	Low	High
Wharton SF	High	High-Moderate	Low	Moderate	High
Isolated Risks					
Bulltown -Tylertown	High	High	High	Moderate	High
Maxwell	High	High	High	Low	High
Remote Cabins	High	High	High	Low	High
Pinelands Residential Center	High	High	High	Low	High
Rutgers- Ag Research Center	High	Moderate	Moderate	Low	High

Table 1:

¹ **Fuel Hazard –** The rank of the wild-land fuels that burn in and around the community, structure, or area. ² **Risk** – The measure of what causes a wildfire and the impact that it has.

³ **Structure Ignitability** – The rank of a structure's ability to resist the threat from a wildfire as determined by an assessment that meets or exceeds NFPA.

⁴ **Firefighting Capability** – An assessment of the equipment, organization, training, communication, mutual-aid agreements, and water supply available and in place.

Summary: Table 1 depicts the areas/communities in Washington Township that are <u>most</u> at risk for Wildfire pursuant to the factors listed in the table above. Although a wildfire can occur throughout Washington Township, the communities listed above shared a rating of high when all four criteria were examined and evaluated.

This Community Wildfire Protection Plan (CWPP) identifies the communities, structures, or areas that would benefit most from threat reduction activities. Table 2 lists recommended fuel reduction, and community education projects, and Table 3 lists recommended options for reducing structural ignitibility.

Fuel Hazard Mitigation Options

Based on the results of the community hazard and risk assessment, priority ratings have been assigned to projects where the reduction of wildland fuel hazards would be effective. Several project activity types and methods of treatment for reducing the surrounding vegetation may be listed for each community, structure or area. These projects and their related priority rankings are listed in the following table. **Table 2:**

Community, struc- ture or area at risk	Recommended Fuel Reduction Project Activity	Treatment Methodology	Overall Priority
Green Bank	Prescribed burning, Education and Outreach	FF Service Open House Direct mailings	1
Lower Bank	r Bank Prescribed burning FF Service Open House Education and Outreach Direct Mailings		1
Wading River	Prescribed burning FF Service Open House Education and Outreach Direct Mailings		1
Jenkins	Prescribed burning Education and Outreach	FF Service Open House Direct Mailings	1
Hog Wallow	Prescribed burning Education and Outreach	FF Service Open House Direct Mailings	2
Wharton SF	Prescribed burning Fire-lane Projects	FF Service Brochure distribution	1
Bulltown-Tylertown	Prescribed burning WUI Fuelbreaks Education and Outreach	FF Service Direct Mailings	2
Maxwell	Prescribed burning WUI Fuelbreaks Education and Outreach	FF Service Direct Mailings	2
Remote Cabins	Prescribed burning WUI Fuelbreaks	FF Service Direct Mailings	2
Pinelands Residential Center	Prescribed burning Education and Outreach	FF Service Direct Mailings	1
Rutgers ARE	Prescribed burning Education and Outreach	FF Service Direct Mailings	2

Summary: Table 2 identifies the specific wildfire mitigation strategies determined to be the highest priority actions that can be undertaken to reduce the risk of wildfire in Washington Township. These specific mitigation actions were then evaluated against one another and priorities were assigned by the NJ Forest Fire Service.

Options to Reduce Structural Ignitability

Methods to reduce structural ignitability are numerous. The following table provides a number of options available to reduce the risk of a wildfire ignition, its severity, and impact to structures.

Community, structure or area at risk	Structure Ignitability Reduction Options	Completed Yes/No	Overall priority
Washington Township	1. Firewise Communities/USA a. Home & structure assessments b. Community clean-ups c. Firewise landscaping d. Firewise Committee established? 2. Fire Preparedness a. Dry hydrants/cisterns b. Label hydrants c. Wildfire exercises d. Mutual aid agreements e. Fire Depts. to support Hazard Mitigation work f. Key access fire lane maintenance 3. Home owner Preparedness a. Home and Yard Firewise maintenance and clean-ups b. Firewise landscaping c. Home escape and evacuation plans d. Property driveway for emergency access 4. Rules & Regulations a. Enforcement of Pinelands Fire Safety regulations b. Property maintenance ordinances c. Enforce local zoning rules d. Conservation easement/fuelbreak conflict 5. Community Preparedness a. LEPC team b. Reverse 911 notifications c. Infrastructure improvements d. Evacuation routes e. Local government to support hazard mitigation work f. Street and Home address visibility a Readw-Set-Go	 a. Yes b. Bulk pick-up available c. No, interested d. No, LEPC interested a. N/a b. N/a c. Yes d. Yes e. Yes f. Yes, but an issue a. Yes, but an issue b. Yes, zoning reg. issue c. No, interested d. Yes, zoning reg. issue a. No b. No c. Yes, but an issue a. No b. No c. Yes, but an issue d. N/A 	1 3 2 1 3 3 3 3 1 3 3 3 3 3 3 3 3 3 3 3 3 1 3 2 3 1
	h. Fire lane fuelbreak	h. No, mowing is an issue	2

Table 3:

Summary: Table 3 is a comprehensive assessment of Washington Township and wildfire reduction options for the Township as a whole.

Page 10

The priorities for implementing the wildfire mitigation options were assigned by the NJ Forest Fire Service. Column 3 ("priorities): 1 = High, 2 = Moderate, 3 = Low

Outreach Options

While all activities considered should include some degree of community outreach, such outreach is often an option on its own. The following outreach options were identified for the community, structure or area listed.

- 1. **Washington Township:** Has an Emergency Operations Plan (updated in 2010 and certified by NJ State Police-OEM)including forest fire information and evacuation plans. The Township has a website under construction and it will include emergency information. Public information currently is provided at the Municipal Building.
- 2. Washington Township: Will obtain Firewise designation through a cooperative partnership with the NJ Forest Fire Service. Wildfire information will be provided to the residents regarding their risk and individual obligations to reduce that risk. Public information is provided at State Park facilities, private campgrounds and canoe liveries by the NJFFS.
- 3. Washington Township: The LEPC will conduct an open house in cooperation with the NJ Forest Fire Service to disseminate information on wildfire risk and individual obligations to mitigate that risk, Firewise concepts and defensible space around their residence
- **4. Washington Township:** Will utilize Forest Fire funding to enhance the street signage and 9-1-1 numbering system for the community and recreational facilities.
- 5. Washington Township: Washington Township and the NJFFS will contact landowners/managers regarding the possible installation of the fire danger Awareness signs at additional locations, including the Jenkins/Penn Forest and Hogwallow/Speedwell areas.

Resources Available:

- 1. From the NJ Forest Fire Service
 - a. Fire Danger and Awareness Signs
 - b. Statewide Fire Restriction Information <u>http://www.state.nj.us/</u> <u>dep/parksandforests/fire/firedanger-restrictions.html</u>
 - C. Smokey Bear Website: <u>http://www.smokeybear.com/</u>

2. Firewise Communities

a. <u>http://www.firewise.org/</u>

Firewise Learning Center: <u>http://www.firewise.org/fw_youcanuse/</u> <u>learningcenter/index.htm</u> "Municipalities that participate in the CWPP process are eligible for funding from the NJ Forest Fire Service to implement their highest priority action(s)," according to NJ Division Forest Fire Warden Greg McLaughlin



Implementation Strategy and Action Plan

The following table displays a list of projects considered from the hazard reduction, structure ignitability and outreach options, ranked by priority. Identifying the responsible agency or landowner, the funding source and the estimated completion timetable will help ensure measurable results for each project.

Table 4:

Rank	Project Type	Community, Structure or Area at Risk	Agency/ Landowner	Fund- ing Needs	Funding Source	Time Table
1	Update Zoning Capability mapping to include Fire Hazard	Township	OEM NJFFS Planning Board	\$	Washington Township State of NJ	2012
2	Update WUI/Property risk assessment as EOP component	Township	OEM NJFFS County OEM	N/A	N/A	2012
3	Key access roads/ Evacuation Routes/ Fuelbreaks	Bulltown Road Godfrey Road Bridge	OEM DPW NJFFS, NJPS	\$25K +	State of NJ Community Forestry Grant	2013 - 2014
4	Residential community and outdoor recreation education/outreach	Residential communities: Green Bank, Lower Bank, Wading River, Jenkins, Hog Wallow Private recreation areas	OEM,NJFFS, Residents Facility owners	\$	State of NJ Washington Township	2012
5	Street signage Address visibility	WUI at risk	OEM/DPW Property owners	\$	State of NJ Washington Township	2013
6	Interagency Emergency pre-planning, Training exercise and hazard reduction mitigation	Wharton and Penn SF's Maxwell fire exercise WUI Forest Prescribed Burning	NJFFS,NJPS, Twsp/Cty. /NJ State Police OEM's, Fire Dept, Landowners	\$	State of NJ Washington Township	2013 - 2014
7	Key access/fuelbreaks	 Batsto Lake Road Franks Ford Rd Lake Oswego Rd Maxwell-Wading River Rd Friendship-Speedwell Rd Quaker B-Washington Rd 	NJPS NJFFS	\$	State of NJ	2015
8	Fire Danger-Awareness signs for Public Informa- tion	Jenkins/Penn Forest Hogwallow/Speedwell	NJFFS Rutgers Exp Sta Landowners	\$	NJFFS	2013

Implementation and Plan Monitoring:

The municipality has agreed by resolution to implement the top five ranked projects within the review period, and is committed to reassessing and implementing additional top ranked projects in the future. These additional projects will be displayed in an updated appendix to this plan.

Resource Materials:

Available at <u>www.njwildfire.org</u>

• Preparing a Community Wildfire Protection Plan, A Handbook for Wildland-Urban Interface Communities, (NACo, NASF, SAF, WGA) March 2004.

- Field Guidance by National Association of State Foresters, June 27, 2003
- Leaders Guide Supplement, International Association of Fire Chiefs

Community Wildfire Protection Plan Certification and Agreement

The Community Wildfire Protection Plan was developed for/by Washington Township;

was collaboratively developed. Interested parties and state land management agencies managing land in the vicinity of Washington Township have been consulted.

- This plan identifies and prioritizes areas for hazardous wildland fuel reduction treatments and recommends the types and methods of treatment that will protect Washington Township.
- This plan recommends measures to reduce the ignitability of structures throughout the area addressed by the plan.

The following entities mutually agree with the contents of this Community Wildfire Protection Plan:

Page 13

Mayor, Washington Township

Fire Chief, Green Bank, Station 451

Fire Chief Lower Bank, Station 452

State Fire Warden, New Jersey Forest Fire Service

Appendix A Updated Project List 2011

The following table lists the projects completed within the past review period, the projects yet to be completed, and new projects proposed.

Rank	Project Type	Community, structure or area at risk	Agency/ Landowner	Funding Needs	Funding Source	Time Table	Project Complete
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		
		(name)		Amount	Grant Funding		

The following entities mutually agree with the updated contents of this Community Wildfire Protection Plan update:

Coordinator, Washington Township OEM

Chief, Green Bank Fire Co., Station 451

Chief, Lower Bank Fire Co., Station 452



New Jersey Forest Fire Service

(Brush clean-up day, Conduct wildland/urban interface structure assessments, Purchase & install fire prevention signs, Install fire hydrants/ dry hydrant systems, Install cisterns, Install street signs, Label hydrants, Adopt property maintenance ordinance, Initiate & support Firewise Communities, Purchase & distribute educational materials, Negotiate fire mutual aid agreements, Start a Citizen's Emergency Response Team (CERT), Plan a wildfire exercise, Provide a reverse 911 system, Improve emergency response communication systems, Improve community infrastructure needs to combat wildfires, Enforce construction, land use and property maintenance regulations, Post prevention signs, Educate law enforcement on wildfire cause & origin investigations, Provide municipal equipment for projects that promote and develop defensible space, Require Firewise landscaping materials, Assess municipal structures prone to wildfire, Sponsor Educational and Awareness Programs, Create Defensible Space, etc.)

NEW JERSEY FOREST FIRE SERVICE -WILDFIRE DEFINITIONS

July 2007

Available Fuel: That portion of the total fuel that would actually burn under various environmental conditions. **Defensible Space:** The area around the perimeter of wildland structures or developments which are key points of defense against encroaching wildland fires, or escaping structure fires. Defensible space provides the room for firefighters to safely conduct protection operations. Defensible space may include a firebreak as well as a fuelbreak within 3 Defensible Space Management Zones.

- Zone 1: An area of maximum modification in which all flammable vegetation is removed (i.e. a firebreak).
- Zone 2: A transitional area of fuel reduction between zones 1 & 3 where the continuity and arrangement of vegetation is modified (i.e. a fuel break).
- Zone 3: An area of management designed to increase forest health and productivity by reducing the amount of overcrowding and related weakened and diseased trees, and thereby reducing the fuel loading.

Firebreak: A natural or constructed barrier used to stop or check fires that occur, or to provide a control line from which to work. A firebreak shall consist of non-flammable type materials such as gravel, sand, or paved roads, irrigated lawns, gardens and orchards, or ponds, lakes, and other watercourses that meet a specified width. This width is to be measured outward 1-1/2 times the height of fuels available to burn directly adjacent to the object. When used in conjunction with a fuelbreak, the size of the firebreak may be reduced.

Firelane: An existing cleared path that needs continuous maintenance to a minimum of 10 feet in width, which is used to gain access for emergency traffic.

Fireline: The part of a containment or control line that is scraped or dug to mineral soil. This may be used for a wildfire or prescribed burn.

Fire Hazard: A fuel complex, defined by volume, type condition, arrangement, and location that determines the degree of ease of ignition and of resistance to control.

Fire Risk: The chance of a fire starting, as determined by the presence and activity of causative agents. In New Jersey, the primary causative agent is humans.

Fuelbreak: A natural or manmade change in fuel characteristics that affect fire behavior so that fires burning into them can be more readily controlled (or managed). When used in conjunction with a firebreak, the following fuel-break standards will be used;

- In moderate fire hazard areas, a minimum fuelbreak of 30 feet is recommended as measured outward from the object.
- In high fire hazard areas, a minimum fuelbreak of 75 feet is recommended as measured outward from the object.
- In extreme fire hazard areas, a minimum fuelbreak of at least 100 feet (200 feet if it protects a community of 100+) is recommended as measured outward from the object.

The fire hazard classification is based on *NJDEP Land Cover/Land Type* GIS data. The recommended modification within the fuelbreak should consist of an average 50% reduction of canopy cover across the treatment and up to a100% reduction in understory fuels. This fuel modification must be maintained over time.

Fuel Loading: The amount of fuel present expressed quantitatively in terms of weight per unit area. This may be available fuel (consumable fuel) or total fuel and is usually dry weight.

Fuel Modification: Manipulation or removal of fuels to reduce the likelihood of ignition and/or lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling, and burning).

Fuelbreak System: A series of modified strips or blocks tied together to form continuous strategically located fuel breaks around land units.

Wildland/Urban Interface: The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.



Fuel Hazard









Wildfire Origins 1924-2007

Road Infrastructure







Property Ownership



Hazard Reduction Projects

















Prescribed Burning (1990-2010)



Paths of Large Fires (1925-Present)



Wildfire Hazard Areas

