State of Utah

Community Wildfire Preparedness Plan

For the Wildland - Urban Interface

Nibley City





Department of Natural Resources Division of Forestry, Fire and State Lands 1594 W North Temple, PO Box 145703, Salt Lake City, UT 84114-5703

Page Intentionally Left Blank

Declaration and Concurrence SHAUN DUSTIN MAYOR NAME **AFFILIATION** 12/7/2020 **SIGNATURE** DATE DAVID ZOOK CITY MANAGER NAME **AFFILIATION** David Book 12/7/2020 **SIGNATURE** DATE **CRAIG BUTTARS** CACHE COUNTY EXECUTIVE NAME AFFILIATION DocuSigned by: 12/22/2020 SIGNATURE DATE WILL LUSK CACHE COUNTY EMERGENCY MANAGER NAME AFFILIATION Richard William Lusk 12/7/2020 SIGNATURE DATE KEN MATHYS CACHE COUNTY FIRE WARDEN NAME **AFFILIATION** DocuSigned by: 12/7/2020 SIGNATURE DATE

CHAD JENSEN	CACHE COUNTY SHERIFF
NAME	AFFILIATION
— Docusigned by: (luad Junsun	12/10/2020
OE11F35514C9414 SIGNATURE	DATE
BLAIN HAMP	BEAR RIVER AREA MANAGER, FFSL
NAME DocuSigned by:	AFFILIATION
Listen Han	12/18/2020
96ER3RD2RF9E4AE SIGNATURE	DATE
KEN THEIS	BEAR RIVER AREA WUI COORDINATOR, FFSL
NAME	AFFILIATION
Cocusigned by: Ken Theis	12/7/2020
AFA7C45703924D5 SIGNATURE	DATE
DUSTIN RICHARDS	BEAR RIVER AREA FMO, FFSL
NAME DocuSigned by:	AFFILIATION
DUSTIN QUEHAQOS	12/7/2020
4A8A82C316E842E SIGNATURE	DATE
Julie Murphy	STATE WILDFIRE FUELS REDUCTION COORDINATOR, I
NAME DocuSigned by:	AFFILIATION
Julie Murphy	12/7/2020

INTRODUCTION

Over 600 of Utah's communities have been classified as "at risk" of wildfire. The safety of the citizens of any community and the protection of private property and community infrastructure is a shared responsibility between the citizens; the owner, developer or association; and the local, county, state and federal governments. The primary responsibility, however, remains with the local government and the citizen/owner.

The purpose of wildfire preparedness planning is to...

- Motivate and empower local government, communities, and property owners to organize, plan, and take action on issues impacting the safety and resilience of values at risk
- Enhance levels of fire resilience and protection to the communities and infrastructure
- Identify the threat of wildland fires in the area
- Identify strategies to reduce the risks to structures, infrastructure, and commerce in the community during a wildfire
- Identify wildfire hazards, education, and mitigation actions needed to reduce risk
- Transfer practical knowledge through collaboration between stakeholders toward common goals and objectives

Outcomes of wildfire preparedness planning...

- Facilitate organization of sustainable efforts to guide planning and implementation of actions:
 - 1. Fire adapted communities 2. Resilient landscapes 3. Safe and effective fire response
- Improve community safety through:
 - ✓ Coordination and collaboration
 - ✓ Public awareness and education
- ✓ Firefighter training
- ✓ Fuel modification
 ✓ Improved fire response capabilities
- ✓ Fire prevention
- Development of longterm strategies

RESOURCES

For resources to complete a wildfire preparedness plan for your community, consider organizations such as the following:

- ✓ Local / Primary fire protection provider
- ✓ Local Resource, Conservation and Development Districts
- ✓ Utah Division of Forestry, Fire and State Lands
- ✓ Utah State Fire Marshal (Dept. of Public Safety)
- ✓ Utah Division of Emergency Management
- ✓ Utah Living With Fire
- ✓ Local fire agencies

- ✓ Local emergency management services
- ✓ USDA Forest Service
- ✓ U.S. Department of Interior Agencies
- ✓ Utah Resource Conservation Districts
- ✓ Utah Soil Conservation Districts

STATEMENT OF LIABILITY

The activities suggested by this template, associated checklist and guidance document, the assessments and recommendations of fire officials, and the plans and projects outlined by the community wildfire council, are made in good faith according to information available at this time. The Utah Division of Forestry, Fire and State Lands assumes no liability and makes no guarantees regarding the level of success users of this plan will experience. Wildfire still occurs, despite efforts to prevent it or contain it; the intention of all decisions and actions made under this plan is to reduce the potential for, and the consequences of, wildfire.

Last revised March 2016

This document provides the outline for and specifies the information recommended for inclusion in a wildfire preparedness plan. Completed Community Wildfire Preparedness Plans should be submitted to the local Area Manager or Fire Management Officer with the Utah Division of Forestry, Fire and State Lands for final concurrence.

PLANNING OVERVIEW

Nibley City signed an agreement with the State of Utah in 2017 to participate in the newly established Wildland Fire Policy, now called the Fire Management System. That agreement requires participating entities to prepare a Community Wildfire Preparedness Plan (CWPP.)

Nibley City has since taken steps to plan for Wildfire mitigation and prevention.

WILDFIRE MITIGATION

Nibley City budgets money each year to help control weeds on public property. These efforts include spraying weeded areas, performing controlled burns, enforce and leasing out property for grazing within the City.

- 1) The City shall identify risk areas within Nibley City and shall take appropriate step to remove weeds and over growth within the City
- 2) The City shall maintain City owned properties or shall lease out properties for agricultural purposes.

PARTNERSHIPS AND COLLABORATION

Nibley City contract with Hyrum City for Fire Services within Nibley City. Nibley City also has an agreement with Cache County Fire to help provide plan reviews for buildings, roads, and developments to ensure future developments, streets and roads meet fire code. Nibley City also contract with Cache County Sherriff's Department for law enforcement and for other emergency services.

Community Legal Structure									
List the government ent	ities associated with the co	mmunity – city	y, town, unincorporated						
community, special service district, homeowner association(s), other.									
Organization	Organization Contact Person Phone E-mail								
Organization	Contact Ferson	Number	E-IIIdII						
Nibley City Mayor	Shaun Dustin	435-752-0431	shuan@nibleycity.com						
City Manager	David Zook	435-752-0431	david@nibleycity.com						
Hyrum Fire Chief	Kevin Maughan	435-245-7634	kmaughan@hyrumcity.com						
	Rod Hammer	435-994-1549	rod.hammer@cachecounty.org						
Cache County Fire Chief									
Cache County Emergency	Will Lusk	435-994-9595	Wlusk@cachesheriff.com						
Manager									
Utah Division, Forestry,	Blain Hamp	435-881-6979	blainhamp@utah.gov						
Fire and State Lands	Area Manager								
	Ken Mathys	435-5365-	kmathys@utah.gov						
	Cache County Fire Warden	6434							

Nibley City Planner	Levi Roberts	435-752-0431	levi@nibleycity.com
Nibley City Public Works Director	Justin Maughan	435-752-0431	jm@nibleycity.com

Population				
Approximate number of homes	1665			
Approximate number of lots	No good data available			
Approximate number of commercial	33			
entities				
Approximate number of full-time residents	8,000			
Approximated number of part-time	No data available			
residents				
Home count is based from 2017 and full-time resid	ents is based from the 2018 census.			

Restricting Covenants, Ordinances, etc. (Attach as appendix)					
For example, home association bylaws may have requirements regarding building construction					
materials or veg	getation removal, or regarding access in a gated community.				
Source Details					
none					

Access Directions to Nibley City

Nibley City contains several access points. Main access from the North and South are along Highway 165. Nibley City can also be accessed on the east side by Highway 89/91. Nibley City also has other local roads that lead in and out of the City, the majority of public roads in Nibley are paved.

All-weather access

All weather access is very good, paved roads lead in and out of the City.

. 1	
Seasonal	ACCESS

The roads that are maintained by the City have good seasonal access.

				Roads				
	None	Some	All	Adequate	Inadeq uate	% Pavement	% gravel	% dirt
Road signs present:								
Stop				x				
Yield				x				
Curve Warning				x				
Will support normal flow of traffic				X				
Loop roads				х				
Dead-end roads				х				
Turnaround space available at end of road for emergency equipment (based on turning radius listed in the guidance document)				X				
Notes/comments:	l	l	l	l	<u> </u>			

Notes/comments:

	Driveways					
	Adequate	Inadequate	No	Few	Most	All
Most driveways width and height	X				X	
clearance, road grades and						
vegetation appearance are						

Individual homeowners have posted their name and address	X			X	
Notes/comments: Most homes have address numbers, but n	o names post	ed			

Struc	Structures								
	None	Few	Some	Many	Most	All			
Wood frame construction					x				
Have wood decks or porches			x						
Have wood, shake or shingle roofs			х						
Are visible from the main subdivision road					х				
Notes/comments:			•		•	•			

Bridges, Gate, Culverts, other							
No Some All							
Bridges support emergency equipment		X					
Gate provides easy access to emergency		X					
equipment							
Culverts are easily crossed by emergency		X					
equipment							

Notes/comments:

All public bridges can support emergency equipment within Nibley City. There are a few private bridges in town that their conditions are unknown.

Bridges limits should observed by emergency responders. Some bridges in the county are marked with weight limits and unmarked bridges will be deemed as unpassable.

			Utilities			
	Below ground	Above ground	Provided by	Phone number	% marked with a flag or other highly visible means	% utilized
Telephone service						
Electrical service	X	х	Rocky Mountain Power	1-800-508- 5088		
Are there homes utilizing propane?		Х				
Are there homes utilizing natural gas?	X		Dominion Energy & Ruby Pipline	435-787-1902 Gas Control Hotline 877-712-2288		
Notes/comments:						

Primary Water Sources					
Approximate % homes using central water system		Near 100	Near 100%		
Approximate %homes using individual wells		Less than	Less than 1%		
Approximate % homes having additional private water source		Less than	15%		
Water provided by Nibley City		Phone	435-752-0431		
Notes/comments: Many homes have additional access to secondary water.					

List locations of water sources:			
Owner	Location coordinates (lat/long)	Accessible by:	
Newton Dam	N 41, 53, 48.61 W 111, 58, 28.02	Truck, Air	
Cutler Dam	N 41, 50, 30.93 W 112, 02. 30.93	Air	
Hyrum Dam	N 41, 37, 15.87 W 111, 51, 42.91	Truck, Air	
Blacksmith Fork River		Truck	

Notes/comments: These are the surrounding open water, Nibley City's Culinary water is provided by wells within the City.

PART II: RISK ASSESSMENT

Estimated Values at Risk Provide an approximation of the estimated current values of residential and commercial property in the area. The County Assessor should be able to assist with this information. Estimated values at risk of commercial and residential property Year 2019

Natural Resources at Risk Describe the natural resources at risk in the area, such as watershed, forest products, wildlife, recreation tourism, etc. The main risk for wildfire in Nibley City is to residential and agricultural land. Nibley City is mostly a bedroom community with large areas of agricultural use. There would be risk the natural habitat along

the Blacksmith Fork River that runs along Nibley east boundary.

The following information is based on the Communities At Risk (CARs) list that was developed cooperatively at the local and state level to assist land management agencies and other stakeholders in determining the scope of the WUI challenge and to monitor progress in mitigating the hazards in these areas. This information is updated annually through the interagency fuel groups. Input the fields that are reflected on the state list found on our website at forestry.utah.gov.

Fire C	ccurre	nce: Number o	f fires in the area for the last 10 years2005 to2008_
[]	0	No Risk	
[x]	1	Moderate	o to 1 fire/township
[]	2	High	2 to 14 fires/township
[]	3	Extreme	Greater than 14 fires/township
Total	1		

Fuel Hazard:	Assess the fuel conditions of the landscape and surrounding the community
[] o	No Risk
moderate dama	Moderate (Moderate to low to control, fire intensities would generally cause age to resources based on slope, wind speed and fuel. Vegetation Types: Ponderosa shrub, grassland, alpine, dry meadow, desert grassland, Ponderosa pine, Aspen riparian.)
moderate dama Vegetation Typ	High (High resistance to control, high to moderate intensity resulting in high to age to resources depending on slope, rate of spread, wind speed and fuel loading. e: Maple, mountain shrubs, sagebrush, sagebrush/perennial grass, salt desert ush, Creosote and Greasewood.)
complete comb	Extreme (High resistance to control, extreme intensity level resulting in almost oustion of vegetation and possible damage to soils and seed sources depending on eed, rate of spread and fuel loading.)
Total1	
	ted: Evaluate the human and economic values associated with the community or as homes, businesses and community infrastructure.
[] o	No Risk
[] 1 and recreationa	Moderate (Secondary Development: This would be seasonal or secondary housing al facilities.)
	High (Primary Development: This would include primary residential housing, d business areas.)
water systems, industrial sites. areas of high hi	Extreme (Community infrastructure and community support: This would be utilities, transportation systems, critical care facilities, schools manufacturing and It may also include valuable commercial timber stands, municipal watersheds and storical, cultural and/or spiritual significance which support and/or are critical to of the community.)
Total2	

Insurance Rating			
Provide the current insurance rating for the community			
ISO Fire Insurance Rating:	6.5		

Protection Capabilities: Insurance Services Organization (ISO) rating for the community will serve as an overall indicator of the protection capabilities.

[] Extreme 3	ISO Rating 10
[] High 2	ISO Rating 7 to 9
[x] Moderate 1	ISO Rating of 6 or lower
Total1_	

Fire	Fuel	Values	Fire Protection	Overall
Occurrence	Hazard	Protected	Capabilities	Rating
1	1	1	1	4
Total: 4-7 Moderate, 8-11 High, 12 Extreme			4-Moderate	
			-	

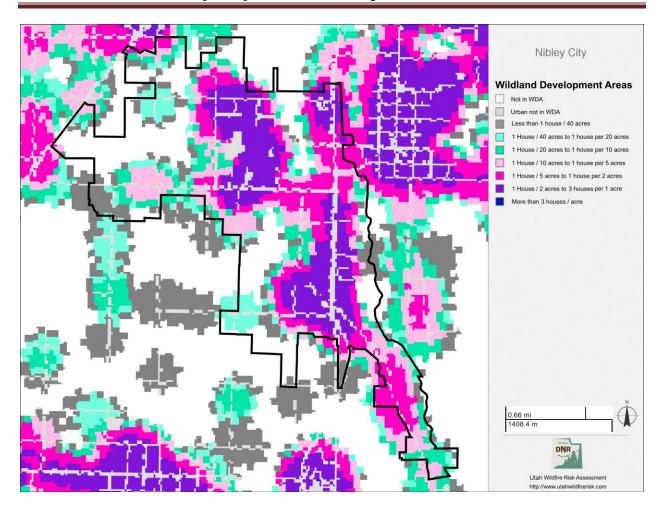
The following information is based on the Utah Wildfire Risk Assessment Portal (UWRAP) and Area of Interest (AOI) Summary Reporting Tool. Reports are generated using a set of predefined map products developed by the West Wide Wildfire Risk Assessment (2012) project. The UWRAP provides a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in Utah.

Wildland Development Areas (WUI): Data set is derived using modeling techniques abased on the Where People Live and population count data available to government agencies from the Department of Homeland Security.

Wildland Development Area (WUI) Impacts: Data set is derived using a Response Function modeling approach. To calculate the Wildland Development Area Impact Response Function Score, the Wildland Development Area housing density data was combined with flame length data and Response Functions assignments to represent potential impacts.

Wildfire Risk: combines the likelihood of a fire occurring (Threat), with those of areas of most concern that are adversely impacted by fire (Fire Effects). Wildfire Threat Index is derived from historical fire occurrence, landscape characteristics including surface fuels and canopy fuels, percentile weather derived from historical weather observations and terrain conditions. Fire Effects are comprised of Value Impacts and Suppression Difficulty.

The Wildland Development Areas data set is derived using modeling techniques based on the Where People Live data set and population count data available to government agencies from the Department of Homeland Security. The LandScan (2009) data obtained from the Department of Homeland Security was used to develop the Where People Live (WPL) data set. The Wildland Development Area (WDA) data set was developed from the Where People Life (WPL) data set by identifying areas that may be impacted by fire burning in wildland fuels. The areas removed from the WPL data set are not expected to be directly impacted by fire burning in wildland fuels. Data is modeled at a 30-meter cell resolution, which is consistent with other Utah WRA layers. The Wildland Development Area classes are based on the number of houses per acre. Class breaks are based on densities understood and commonly used in



	Past Accomplishments
Prevention	• <i>N/A</i>
Preparedness	 Updated Emergency Radios and Communication Systems at Nibley City Hall for Nibley's Emergency Operations Center Updated Nibley City's Emergency Plan
Mitigation	 Identifying Areas in Nibley with weeds or that are at risk Lease out Nibley City property for grazing or agricultural use in order to control potential fuel. Controlled Weed Burns and mowing of vacant property within Nibley City
Maintenance	Continue to identify problem areas within Nibley City and take proper steps to control weed and brush growth.

PART III: RISK REDUCTION GOALS/ ACTIONS

Goals of Plan: Provide a brief statement under the Prevention, Preparedness, Mitigation and Maintenance goals. These should align with the pillars of the National Cohesive Strategy and the Utah Catastrophic Wildfire Reduction Strategy (1.Reslient Landscapes 2. Fire Adapted Communities 3. Wildfire Response).

Identification of Actions: Provide detailed project information. These projects/actions can be mapped/tracked in the Utah WRA portal and should be consistent with a Cooperative Agreement in compliance with the Wildfire Policy if applicable.

GOAL A: PREVENTION – Activities directed at reducing the occurrence of fires, including public education, law enforcement, personal contact.

Goal A.1 –					
Action(s):	Timeline:	Community Lead:	Priority:		
Mail out flyer to homes on Hollow Road on how to reduce the chance of wildfire	Spring 2021	Nibley City Planning	Hight		
Utilize One Less Spark campaign material during Heritage Days	Summer 2021	Ken Mathys	High		

GOAL B: PREPAREDNESS – Activities that lead to a state of response readiness to contain the effects of wildfire to minimize loss of life, injury, and damage to property. Including access to home/community, combustibility of homes/structures and creating survivable space.

Goal B.1 – Evaluate, upgrade and maintain community wildfire preparation					
Action(s):	Timeline:	Community Lead:	Priority:		
S-130, S-190 Basic Red Card class will be taught in the spring of 2021. S-212 Wild land Fire Saws class will be taught spring of 2021. S-211 Wild land Fire Portable pumps class will be taught spring of 2021. S-131 Wild land Fire Advanced Firefighter will be taught spring of 2021. RT -130 Wild land Fire Refresher courses will be taught to the county fire departments spring of 2021. RT - 212 Wildland Fire Saws refresher course.		Ken Mathys	High		

Goal B.3 – Address identified regulative issues impacting community wildfire prevention and response needs.					
Action(s): Timeline: Community Lead: Priority:					
City zoning ordinances, plan development approval though City Planning Commission and City Council	Spring/Summer 2021				
Notes, updates ,and monitoring					

Goal B.4 – Evaluate response facilities and equipment.				
Action(s):	Timeline:	Community Lead:	Priority:	
All Hyrum City and wildland fire equipment to be inspected and approved for response.	Spring 2021	Ken Mathys	High	

GOAL C: MITIGATION – Actions that are implemented to reduce or eliminate risks to persons, property or natural resources including fuel treatments and reduction.

Goal C.1 – Decrease fuels within the county to reduce wildfire impact in and around the community.					
Action(s):	Timeline:	Community Lead:	Priority:		
Identify areas on Hollow Road for weed and overgrowth reduction	Summer 2021	Justin Maughan	High		
Review all other City property for weed and overgrowth reduction	Summer 2021	Justin Maughan	High		
Notes, updates , and monitoring					

Fire History Statistics

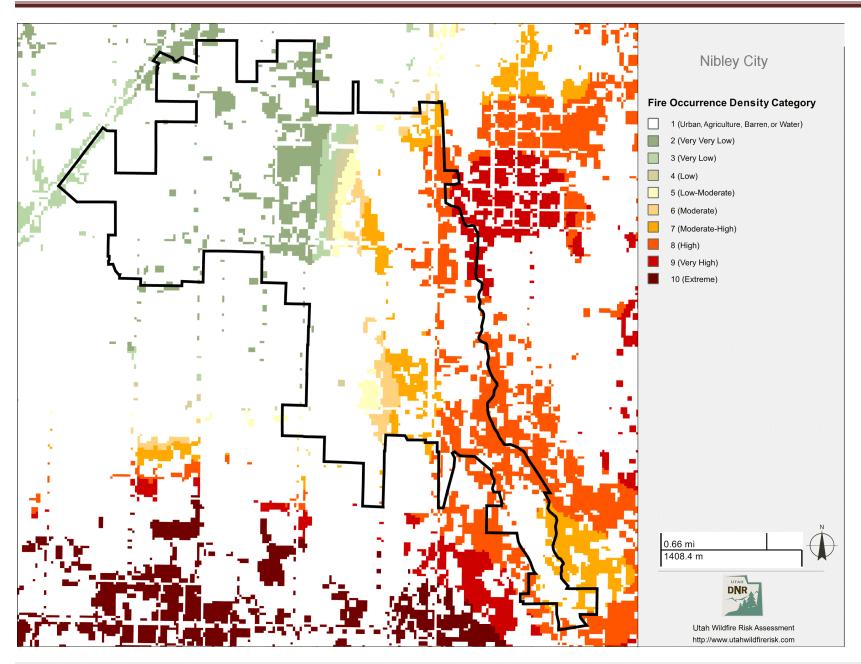
1. **Description**

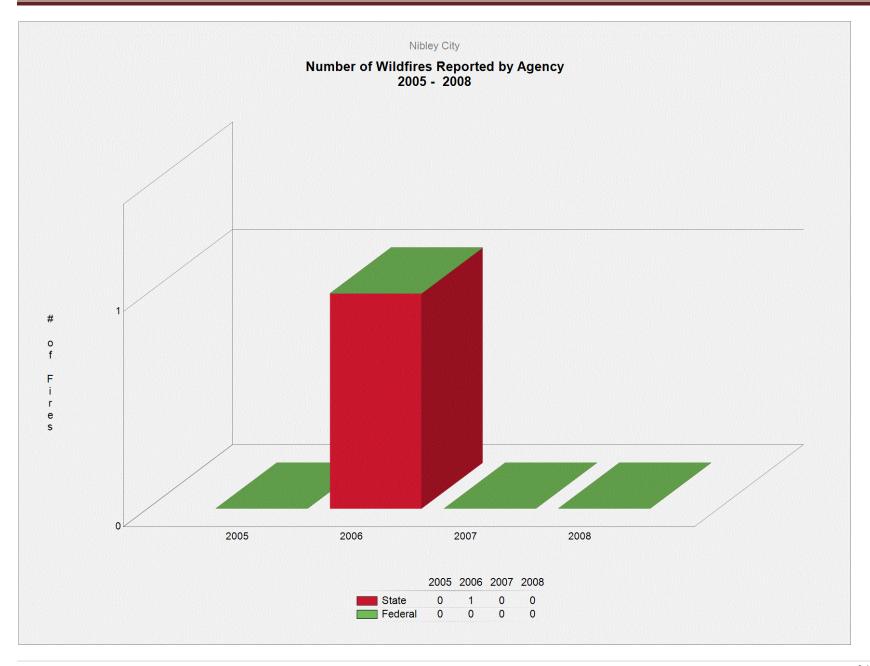
Fire history statistics provide insight as to the number of fires, acres burned and cause of fires in Utah. These statistics are useful for fire prevention and mitigation planning. They can be used to quantify the level of fire business, determine the time of year most fires typically occur and develop a fire prevention program aimed at reducing the fire occurrence rate based on specific fire cause information.

Ten years of historic fire report data where fires had a specific defined location were used to create the fire occurrence summary charts. Wildfire Ignition data was compiled from federal and state sources for the years 1999 through 2008. Local fire protection district fire occurrence from 2004-2009 was used to develop the Fire Occurrence Density but insufficient data was available from these fires to have them included in the Fire History Statistics.

Federal and state provided wildfire ignition data was spatially referenced by latitude and longitude coordinates. All ignition references were updated to remove duplicate records.

- 5. Federal agency wildfire ignitions are symbolized by the cause of fire. Fire reports were gathered from the following federal data sources:
 - Dept. of Agriculture U.S. Forest Service
 - Dept. of Interior U.S. Fish and Wildlife Service
 - Dept. of Interior Bureau of Land Management
 - Dept. of Interior Bureau of Indian Affairs
 - Dept. of Interior National Park Service
- 6. State and local wildfire ignitions were gathered from fire department reports submitted by:
 - Utah Division of Forestry
 - Volunteer Fire Departments
 - Combination Fire Departments (paid and volunteer)
 - Paid Fire Departments
 - Fire Protection Districts





Suppression Difficulty

Description

The Suppression Difficulty data layer reflects the difficulty or relative cost to suppress a fire given the terrain and vegetation conditions. This layer is an overall index that combines the slope steepness and the fuel type characterization to identify areas where it would be difficult or costly to suppress a fire due to the underlying terrain and vegetation.

The rating was calculated based on the fireline production rates for hand crews and engines with modifications for slope, as documented in the NWCG Fireline Handbook 3, PMS 401-1 (NWCG 2004).

The surface fuel models in Utah were grouped into three categories: slow, medium and fast fireline production.

Fireline production capability on five slope classes was used as the basic reference to obtain the Suppression Difficulty Score. To remain consistent with the Value Impacted Scores output, a range of difficulty was assigned.

The range was from 1 (least difficult) to 9 (most difficult). The Suppression Difficulty Score was developed for each combination of surface fuel type and slope category.

Suppression Difficulty Category	Acres	Percent
1 (Fast Production Rate 0-25% Slope)	598	87.6 %
2	61	8.9 %
3	2	0.3 %
4	19	2.8 %
5	1	0.1 %
6	2	0.3 %
7	0	0.0 %
8	0	0.0 %
9	0	0.0 %
10	0	0.0 %
11	0	0.0 %
12	0	0.0 %
13	0	0.0 %
14 (Slow & Fast Production Rates 75%+ Slope)	0	0.0 %
Total	683	100.0 %

Wildfire Risk

Description

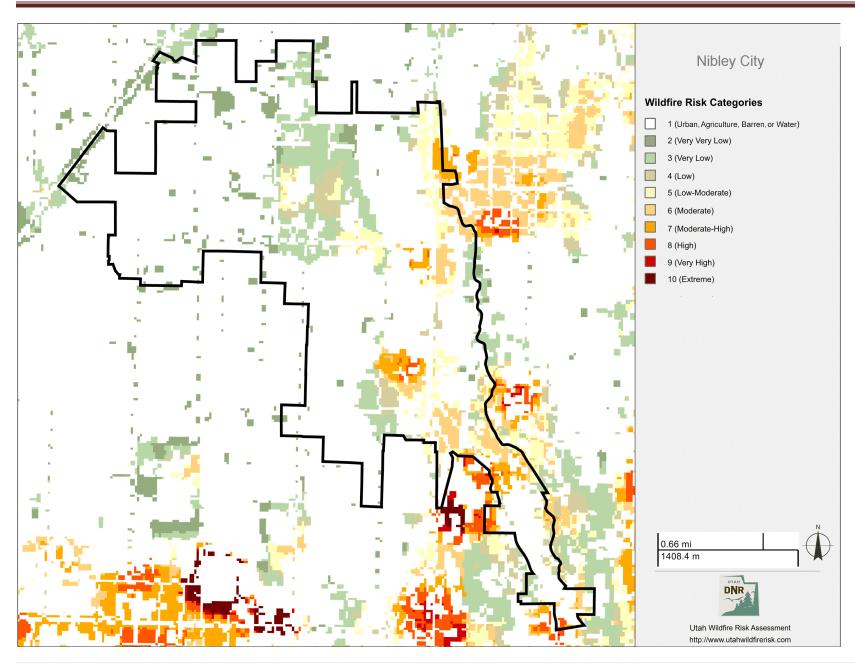
Wildfire Risk represents the possibility of loss or harm occurring from a wildfire and is displayed in the Utah WRA by the Wildfire Risk Index. It is a primary output of the Utah Wildfire Risk Assessment (Utah WRA). Wildfire Risk combines the likelihood of a fire occurring (Threat), with those areas of most concern that are adversely impacted by fire (Fire Effects), to derive a single overall measure called the Wildfire Risk Index. It identifies areas with the greatest potential impacts from a wildfire considering the likelihood of an area burning and the impacts to values and assets aggregated together. Since all areas in Utah have the Wildfire Risk Index calculated consistently, it allows for comparison and ordination of areas across the entire state.

Fire Threat is a measure that has been calculated which is closely related to the likelihood of an area burning. It is mapped as the Fire Threat Index in the Utah WRA.

Fire Effects are comprised of two inputs: Value Impacts and Suppression Difficulty. The Fire Effects Index identifies those areas that have important values that could be adversely impacted by a wildfire and also might be in areas where fire suppression activities are difficult. The Values Impacted defined in the Utah WRA including Wildland Development Areas (WUI), Forest Assets, Riparian Assets, Drinking Water Importance Areas (watersheds) and Infrastructure Assets. Refer to the each Values Impacted description for more information about these values.

To aid in the use of Wildfire Risk for planning activities, the output values are categorized into nine (9) categories. These are given general descriptions from Lowest to Highest Risk.

Wildfire Risk Category	Acres	Percent
1 (Urban, Agriculture, Barren, or Water)	1,988	74.4 %
2 (Very Very Low)	101	3.8 %
3 (Very Low)	230	8.6 %
4 (Low)	72	2.7 %
5 (Low-Moderate)	117	4.4 %
6 (Moderate)	95	3.6 %
7 (Moderate-High)	54	2.0 %
8 (High)	14	0.5 %
9 (Very High)	0	0.0 %
10 (Extreme)	0	0.0 %
Total	2,671	100.0 %



PART IV: CONTACTS

The contacts in this part identify community resources that can be used to complete the goals of the plan.

Planning Committee Member List			
Name	Affiliation	Phone Number	E-mail
Stephen Nelson	Nibley City Planner		
David Zook	Nibley City Manager		
Shaun Dustin	Nibley City Mayor		
Chris Searl	Nibley City Emergency		
	Manager		
Kevin Maughan	Hyrum Fire Chief		
Ken Mathys	Cache County Fire		
	Warden		

Schools				
School	Contact Person	Phone Number	E-mail	Address
Heritage Elementary		(435) 792- 7696		925 W 3200 S, Nibley, UT 84321
Nibley Elementary		(435) 752- 8303		2545 S 660 W, Nibley, UT 84321
Thomas Edison		(435) 787- 2820		1275 W 2350 S, Nibley, UT 84321

Private Equipment Capabilities				
Type of Equipment	Contact Person	Phone Number	E-mail	Address
N/A				

Other			
Organization	Name	Phone Number	E-mail