



NIBLEY CITY COUNCIL MEETING AGENDA

Thursday, January 28, 2021 – 6:30 p.m.

In accordance with Utah Code Annotated 52-4-207 and Nibley City Resolution 12-04, this meeting may be conducted electronically. The anchor location for the meeting will be Nibley City Hall, 455 West 3200 South, Nibley, Utah. The public may participate in the meeting via the Zoom meeting link provided at www.nibleycity.com. Public comment should be submitted to cheryl@nibleycity.com by 6:30 p.m. and will be read into the public record.

1. Opening Ceremonies (Councilmember Bernhardt)
2. Call to Order and Roll Call (Chair)
3. Approval of the Previous Meeting Minutes and Current Agenda (Chair)
4. Public Comment Period¹ (Chair)
5. Planning Commission Report
6. Approval of Items on the Consent Agenda²
 - 6-a. **Resolution 21-03:** Adopting the 2020 Bear River Region, Utah Pre-Disaster Mitigation Plan
 - 6-b. **Resolution 21-04:** Appointment of Ryan Werner as an Alternate to the Nibley City Planning Commission
7. **Department Report** – Fitness/Recreation
8. **Public Hearing** – Ordinance 21-01 (previously numbered 20-17): Amendments to the Nuisance Ordinance
9. **Public Hearing** – Ordinance 21-02 (previously numbered 20-20): Establishing a Time Limit and Deposit to Install Landscaping for New Construction
10. **Discussion & Consideration** – Disposal of Real Property located at 1221 West 3200 South (parcel tax ID 03-017-0016), and an Accompanying Right-of-Way Agreement with Dell Loy Hansen
11. **Workshop** – Ordinance 21-03: Commercial Zoning Standards
12. **Council and Staff Report**

In compliance with the Americans With Disabilities Act, reasonable accommodations for individuals with disabilities will be provided upon request. For assistance, please call (435) 752-0431.

¹ Public input is welcomed at all City Council Meetings. 15 minutes have been allotted to receive verbal public comment. Verbal comments shall be limited to 3 minutes per person. A sign-up sheet is available at the entrance to the Council Chambers starting 15 minutes prior to each council meeting and at the rostrum for the duration of the public comment period. Commenters shall identify themselves by name and address on the comment form and verbally for inclusion in the record. Comment will be taken in the order shown on the sign-up sheet. Written comment will also be accepted and entered into the record for the meeting if received prior to the conclusion of the meeting. Comments determined by the presiding officer to be in violation of Council meeting rules shall be ruled out of order.

² Items on the Consent Agenda are considered to be routine and/or non-controversial, and will be approved in one vote.



#6 Approval of Items on the Consent Agenda

Description	5-a. Resolution 21-03: Adopting the 2020 Bear River Region, Utah, Pre-Disaster Mitigation Plan 5-b. Resolution 21-24: Appointment of Ryan Werner as an Alternate to the Nibley City Planning Commission
Department	Administration
Presenter	Mayor Dustin
Recommendation	Move to approve the items included on the 1-28-2021 Consent Agenda
Reviewed By	Mayor, City Manager

Background:

With this agenda, the City will use a Consent Agenda. Items are placed on the consent agenda that are considered to be routine and/or non-controversial. Discussion is not anticipated on these items and all of the items on the consent agenda can be approved with a single vote. If a council member would like to discuss any of the consent agenda items during the meeting, a council member may request to move that item from the consent agenda to the regular portion of the agenda.

a. Resolution 21-03: Adopting the 2020 Bear River Region, Utah, Pre-Disaster Mitigation Plan

The Bear River Association of Governments (BRAG), in coordination with local communities, recently completed a FEMA-approved Pre-Disaster Mitigation Plan. This Plan identifies potential hazards in the community and potential measures and projects

to mitigate potential risk to life and property. Nibley City Staff coordinated with BRAG Staff during the development of the Plan to assess risks and identify mitigation strategies. Based upon the Risk Assessment, the greatest risk in Nibley comes from hazards related to flood, landslides, liquefaction, steep slopes, problem soils and wildfire. Specific recommended mitigation actions include:

- Address deficiencies in current stormwater system
- Explore possibility of doing a landslide risk study for east section of city near the Blacksmith Fork River
- Hold an educational event on potential impacts from expandable and collapsible soils.
- Follow recommendations in local CWPP. Work with UDWR, Utah FFSL, and county on fire break/fuel load reduction east of town.
- Install back-up generators for City Hall, Public Works bldg, 2 city wells, and 3 lift stations.
- Assess existing 2011 floodplain ordinance and see where deficiencies exist.
- Explore possibility of implementing a geologic hazards ordinance - work with UGS to customize.

Adoption of this Plan is required to be eligible for Federal Hazard Mitigation Grants. Staff recommends adoption of the Plan.

b. Resolution 21-04: Appointment of Ryan Werner as an Alternate to the Nibley City Planning Commission

To support the Planning Commission, Mayor Dustin recommends the appointment of Ryan Werner as an alternate Planning Commissioner.

RESOLUTION 21-03

ADOPTING THE 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN

WHEREAS Nibley City recognizes the threat that natural hazards pose to people and property within the community; and

WHEREAS Nibley City has participated in the creation of a multi-hazard mitigation plan, hereby known as the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in Nibley from the impacts of future hazards and disasters; and

WHEREAS adoption by Nibley City Council demonstrates their commitment to hazard mitigation and achieving the goals outlined in the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN.

NOW THEREFORE, BE IT RESOLVED THAT THE NIBLEY CITY COUNCIL, ADOPTS THE 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN.

This resolution shall be effective on the date it is adopted.

DATED this _____ day of _____, 2021.

Shaun Dustin, Mayor

ATTEST:

David Zook, City Recorder



*Box Elder
Cache
Rich*

December 2020

PRE-DISASTER MITIGATION PLAN

Bear River Region, Utah



Photo courtesy of the USFS Logan Ranger District

Executive Summary

Welcome to the 2020 Bear River Region Pre-Disaster Mitigation Plan!

This plan serves as the FEMA-approved natural hazard mitigation plan for Box Elder, Cache, and Rich counties, and the 39 incorporated municipalities in extreme northern Utah. The site provides information on local and regional natural hazards, risk assessments for each community, community mitigation strategies, historical hazards information, and other natural hazards planning and mitigation resources.

It is hoped that through learning more about natural hazards and implementing the strategies included in this plan, potential losses to life, property, infrastructure, and other critical resources can be greatly reduced.

How to use this plan

The sections in this plan include information on local community risks, natural hazards data and

information, resources for adopting the plan, implementing mitigation strategies, and many other resources.

Visit brag.utah.gov for a link to the online version of this plan.

What is hazard mitigation?

According to the Federal Emergency Management Agency (FEMA), hazard mitigation is defined as, "...any sustainable action that reduces or eliminates long-term risk to people and property from future disasters. Mitigation planning breaks the cycle of disaster damage, reconstruction, and repeated damage."

In addition to reducing potential losses, hazard mitigation measures also:

- Reduce vulnerability of communities to disasters.
- Promote individual and community safety and their ability to adapt to changing conditions and recover.

- Promote community vitality after a disaster.
- Lessen response and recovery resource requirements.
- Result in safer communities that are more self-reliant.

Does hazard mitigation work?

Yes, hazard mitigation works! By making smart investments now in implementing hazard mitigation strategies, local governments can help save lives, reduce losses to property and infrastructure, and preserve community assets that, otherwise, could be lost. According to FEMA, for every \$1 spent on hazard mitigation projects funded by FEMA, local governments can save \$6 by implementing mitigation strategies in their communities. Additionally, if communities adopt ordinances that help guide smart development in natural hazard areas, they can save around \$11 for every \$1 spent

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Canal Breach repairs in Box Elder County in 2020 (Photo courtesy of Box Elder County Emergency Management)

Plan Purpose and Use

Project scope

This plan identifies the region’s natural hazards, helps communities understand their vulnerabilities to those hazards, and documents potential solutions that can significantly reduce threats to life, property, infrastructure, natural systems, and other community assets.

This is not an emergency response or management plan. Certainly, the plan can be used to identify weaknesses and refocus emergency response planning, which is an important mitigation strategy. However, the focus of this plan is to support better decision making directed toward minimizing impacts from natural hazard events.

Participating jurisdictions in the Bear River Region

RICH COUNTY	CACHE COUNTY
Garden City	Amalga
Laketown	Clarkston
Randolph	Cornish Town
Woodruff*	Hyde Park City
BOX ELDER COUNTY	Hyrum City
Bear River City	Lewiston City
Brigham City	Logan City
Corinne City	Mendon City
Deweyville	Millville City
Elwood	Newton
Fielding*	Nibley
Garland City	North Logan City
Honeyville City	Paradise
Howell	Providence City
Mantua	Richmond City
Perry City	River Heights City
Plymouth	Smithfield City
Portage	Trenton
Snowville	Wellsville City
Tremonton City	
Willard City	

**If jurisdictions did not participate in the planning process, including all types of communication or meeting attendance, they are not currently considered a participating jurisdiction.*

Planning Objectives

- Protection of life before, during, and after the occurrence of a natural hazard event
- Protection of emergency response facilities and capabilities
- Improved communications and warning systems
- Protection of homes, businesses, educational facilities, cultural-historical amenities, natural systems, and other community assets
- Identification and mapping of critical facilities, homes, businesses, educational facilities, cultural-historical amenities, natural systems, and other community assets
- Government collaboration across jurisdictional boundaries before, during, and after natural hazard events

How the plan can be used

Help local and appointed officials plan, design, and implement

programs and projects that help reduce community vulnerability to, and potential losses from, natural hazards.

Help facilitate inter-jurisdictional coordination and collaboration related to hazard mitigation planning and implementation. Provide guidance for local emergency management and planning offices and staff. Help local jurisdictions comply with the Disaster Mitigation Act of 2000, through adoption of this plan. This helps communities qualify and apply for certain federal pre- and post-disaster funds.

Increasing local capacity

One of the many benefits of having this regional natural hazard mitigation plan is the potential it creates for local governments and other entities to expand their local planning and implementation capacity. Communities can reference this plan in their local land use zoning and ordinances, and can show developers, builders, lenders, elected officials, and

members of the general public where hazards exist and what is at stake if hazard events occur. Likewise, council members, planning and zoning commissions, and others can strategize on how they can plan better for hazards in their city, town, or county to mitigate potential impacts.

Additionally, most communities in the Bear River Region are experiencing fairly steady population growth - some are growing quite rapidly. As these communities grow, their ability to increase their local capacity for improved land use and natural hazards planning and implementation will also likely occur as function of that growth.

Likewise, as a local Association of Governments, BRAG provides general planning technical assistance to cities, towns, and counties in the Bear River Region, helping them increase their capacity to plan for and mitigate hazard risks in their respective communities.

Photo: Historic Willard landslide and flooding event in 1923 courtesy of Utah State University Special Collections.



Kick-off Meeting

A regional kick-off meeting was held on December 4, 2018 with county emergency managers and others.

Risk Assessment Meeting

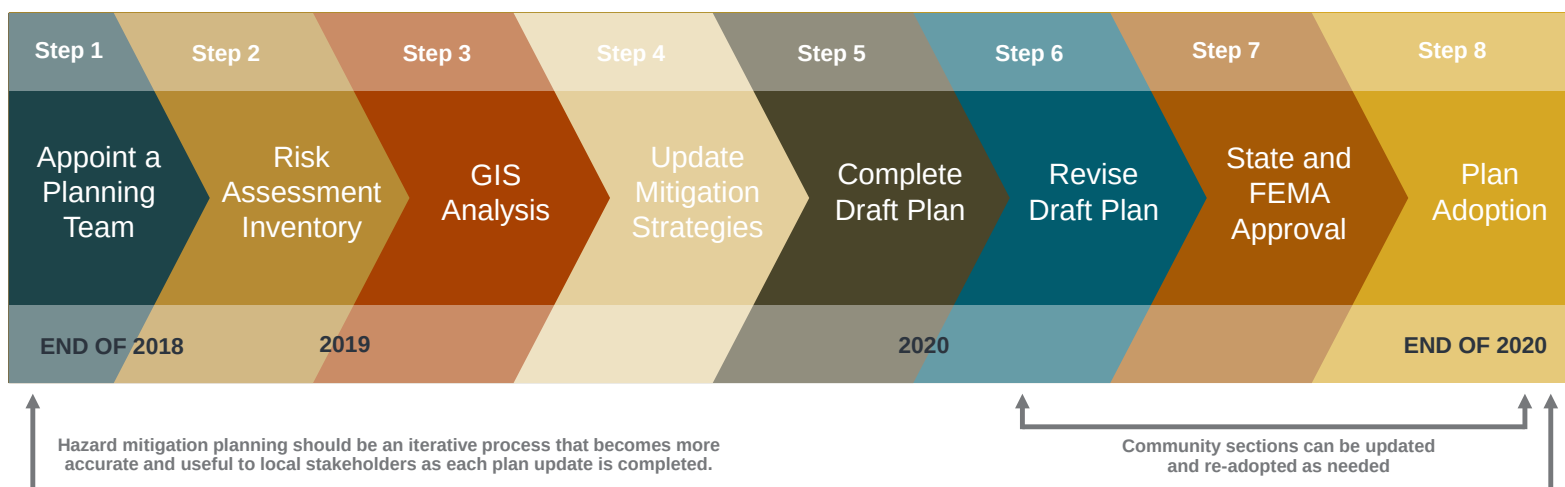
County-level working group meetings were held in March and April of 2019.

Mitigation Strategies Meeting

County-level working group meetings were held in January and February of 2020.

Pre-Adoption Meeting

A regional pre-adoption meeting was held on October 14, 2020 to present the draft plan and provide training.



Project timeline and various steps in the planning process for the 2020 Bear River Region Pre-Disaster Mitigation Plan.

The Planning Process

County Working Group Meetings:

RISK ASSESSMENT:

Review of mapped critical facilities and infrastructure; Wildfire hazards presentation (Utah FFSL); Geologic hazards presentation (Utah Geological Survey); and review of online hazards map.

MITIGATION STRATEGIES:

FEMA-approved mitigation strategies and floodplain model ordinances (FEMA); Geologic hazards model ordinance (Utah Geological Survey); Community potential loss analyses; and a mitigation strategies exercise.

PRE-ADOPTION:

Presentation of the draft PDM Plan and findings; Plan adoption and implications for local governments;

Overview and project timeline

While the pre-disaster mitigation plan update process has been standardized to a certain degree by FEMA, through working with local stakeholders included in county working groups, BRAG has adjusted the process to fit the needs of Bear River Region communities.

The sections below provide more information on critical components of the planning process.

Forming county working groups and meetings

Early on in the planning process, BRAG staff consulted with county emergency managers in Box Elder, Cache, and Rich Counties to help determine project details, and come up with a list of initial agencies, organizations, and other groups to include in county-wide working groups. These organizations were invited to attend the first regional kick-off meeting in 2018. During this meeting, BRAG staff, county emergency

managers, Utah Division of Emergency Management staff, and others created a list of additional stakeholders that needed to be brought to the table to participate in the planning process.

County working groups were then formed, and three meetings were held for each respective county to discuss natural hazards and community risk assessments, create local mitigation strategies, and to present the draft plan and discuss plan promulgation (See **APPENDIX B** for meeting agendas and attendance lists).

In addition to the county working group meetings, many other meetings were held with state staff and local communities. Mayors, council members, city/town staff, and others were very generous with their time, especially as they worked with BRAG to create realistic mitigation strategies that fit their needs. Below is a list of other organizations BRAG staff met with as part of this plan update, whether in person, e-mail, or over phone or video calls:

- Utah Division of Emergency Management
- BRAG Governing Board (x2)
- Local GIS Analysis Professionals
- Utah Geological Survey
- Utah Forestry, Fire, and State Lands
- ESRI Denver Office
- Northwest Band of Shoshone Native American Tribe
- Box Elder Mayor's Association Meeting (Mayors in attendance representing: Willard, Brigham City, Mantua, Snowville, Perry, Honeyville, Deweyville, Tremonton, Portage; and Box Elder County representatives)



Local city, town, and county meetings:

Amalga	Lewiston
Bear River City	Logan
Brigham City	Mantua
Box Elder	Mendon
County	Millville
Cache County	Newton
Clarkston	Nibley
Corinne	North Logan
Cornish	Paradise
Deweyville	Perry
Elwood	Plymouth
Garden City	Portage
Garland	Providence
Honeyville	Randolph
Howell	Rich County
Hyde Park	Richmond
Hyrum	River Heights
Laketown	Smithfield
	Snowville
	Tremonton
	Trenton
	Wellsville
	Willard

Public outreach

Public outreach for the plan update was achieved via letters, e-mails, the presence of a hazard mitigation page on the BRAG website at brag.utah.gov, and public service announcements in local newspapers (See **APPENDIX B** for detailed agendas and lists of attendees for each meeting, and **APPENDIX C** for all other public outreach documentation). Through the use of all of these approaches, the following stakeholders were invited to participate in the planning process:

- All cities, towns, and counties in the Bear River Region including: Elected and appointed officials, emergency managers, city managers, clerks, public works staff, civil engineers, planners, and other related staff
- Local citizens
- Surrounding states, regions, and counties
- Federal and state agencies, including land management agencies and emergency

management staff

- School districts and local universities/colleges
- MPO, UDOT, and other transportation planners
- Northwest Band of Shoshone Nation

On April 15, 2019, BRAG staff met with members of the Northwest Band of Shoshone Nation at the tribal office in Brigham City. Though there is no reservation land in the region, the tribe is an integral part of the community. As such, the tribe as a sovereign nation is included in this plan, though no technical analysis was provided. The tribe was included in written correspondence and made aware of the planning process so they could provide input if desired.

Incorporating other plans and studies

Other plans and studies referenced and incorporated into this plan update process include a variety of federal, state, regional, and local plans. Some plans were from other regions in the U.S. and Canada, while others were from

more local communities in Utah. FEMA provides a variety of useful hazard mitigation planning resources available at fema.gov, and the State of Utah's Hazard Mitigation Plan, available at hazards.utah.gov, has been an extremely valuable resource during the creation of this plan. Plans and studies incorporated into this plan update process include the following:

- Utah Public Health Joint Risk Assessment, 2014 Recently completed
- Community Wildfire Protection Plans (CWPP) for Box Elder County, Deweyville, Honeyville, Plymouth, Portage, and Willard (2019)
- Garden City Community Wildfire Protection Plan
- Utah Geological Survey, Guidelines for Evaluating Surface-Fault Rupture Hazards in Utah, 2003

- Other Utah Geological Survey guides and booklets
- Utah Natural Hazards Handbook, 2008
- UGS Geologic Hazard Model Ordinance, 2020
- Utah DEM Flood Damage Prevention Ordinances
- Floodplain Management in Utah; Quick Guide, 2003
- Box Elder County. Hansel Valley floodplain resident letters, maps, and photos, 2014
- Local Community Risk Assessment Surveys, 2018

Other plans and websites referenced for the design of this plan:

- Six-County Regional Pre-Disaster Mitigation Plan (Utah), 2020
- New River Valley Hazard Mitigation Plan (Virginia), 2017
- City of Los Angeles 2018 Local Hazard Mitigation Plan
- City of Boulder Multi-Hazard Mitigation Plan, 2018
- South Central Region Multi-Jurisdiction Hazard Mitigation Plan, 2018
- San Diego County Multi-Jurisdiction Hazard Mitigation Plan, 2017
- Utah CDO Online Tools and Resources - ESRI StoryMaps
- Montana Forest Action Plan (Online)
- Seattle Hazard Explorer (Online)
- Are You Ready Tampa Bay? (Online)
- Denver ESRI Office and ESRI Denver ArcGIS HUB Site*

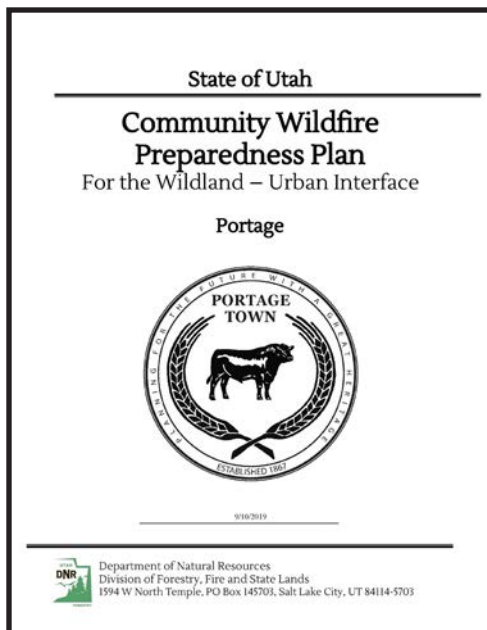
staff who provided valuable input on potential ESRI tools and apps for use in creating this plan. A big thanks also to the Utah Community Development Office (CDO) staff for sharing examples of excellent plans and guides they have created recently by utilizing similar ESRI products.

Incorporating this plan into other community plans and studies

There are several ways that communities can incorporate this plan into their own local plans and studies. Some communities in the past have adopted this plan as an appendix or reference to their General Plan. Others have used the maps and hazards data in particular as a means of disclosing potential risks for future development, allowing developers and builders to do additional site assessments or studies before building. Ideally, the data layers in this plan could be used as a supplement for sensitive lands planning and to justify additional ordinances for future development which can reduce potential losses and liability for local governments. See the Implementation Resources tab at the top of this website for links to model geologic and floodplain ordinances.

Other plans, studies, and projects that can incorporate the information from this plan include:

- Capitol improvements list and plans
- Future infrastructure studies and projects
- Regional and community level sensitive lands studies and plans
- General plan updates
- Community Wildfire Preparedness Plans



The Community Wildfire Preparedness plan for Portage Town, completed in 2019, is a great document to reference in this pre-disaster mitigation plan. In some areas, these types of plans are being merged in order to better coordinate mitigation efforts across multiple agencies and jurisdictions.

*Thanks to the ESRI Denver Regional Office

- Community Emergency Response Plans
- County Resource Management Plans
- Hazard mitigation related grant applications
- Many others...

Identifying natural hazards

Hazards were identified and evaluated for inclusion in this plan based on historical review of past events, synthesis of existing reports and data, hazard mapping analysis, and input from local stakeholders (see graphic to the right). Consideration for inclusion was based on the likelihood of a hazard's occurrence, location of potential hazard risk areas, and the potential impact of the event in terms of its effect on human life, property, infrastructure, and other assets/amenities. It should be noted that not all hazards were analyzed with GIS software, due to the fact that GIS data does not exist for all hazards. However, all hazards on this list were discussed and qualitative analysis



Flooding in Box Elder County in 2017. Frozen conditions and heavy rainfall contributed to many homes and properties being flooded in the eastern part of the county.

was performed on a certain level for each hazard based on the best available data.

For information on hazard locations and extents, click on the "Hazard Maps and Risks" tab at the top to view an interactive map of natural hazards in the Bear River Region (includes only data from the left column).

Also, for more information on natural hazards, including specific

hazard definitions, click [HERE](#) to visit the 2019 Utah Hazard Mitigation Plan website. Scroll down until you see photos of various hazards and click on each one to learn more.

***Note:** Due to the outbreak of COVID-19 in 2020, pandemics are listed as a natural hazard in the Bear River Region. However, due to the fact that the COVID-19 outbreak occurred late in the planning process, no analysis was included and no mitigation strategies were created. Local emergency managers anticipate the need for mitigation strategies for pandemics in the future. If local governments would like to include strategies for pandemics in this plan updated, the plan can be amended at a later date and re-adopted by the affected jurisdiction.

Identifying structures, critical facilities, infrastructure, and other assets

The table to the right shows the types of structures (ex: homes, businesses), critical facilities (ex: fire station, town hall, post office),

HAZARDS - GIS DATA	HAZARDS - NO GIS DATA
Avalanche Terrain	Air Quality
Dam Failure	Alluvial Fans
Flood (FEMA 100-Year)	Climate Change
Flood (Soils/Purdue)	Drought
Flood (Valley Bottom)	Insect Infestation/Plant Disease
Geologic Faults (Quaternary)	Radon
Landslide	Severe Weather
Liquefaction	Tornado
Steep Slopes	Seiche
Problem Soils (Struct. w/ Basements)	Volcanic
Problem Soils (Struct. w/o Basements)	Seasonal Population Growth
Wildfire (Utah FFSL)	*Pandemics
Wildfire (US Forest Service)	

Natural hazards identified in the Bear River Region. Though some natural hazards data exists in GIS format, and were utilized for analysis in community risk assessments, risks were also identified and strategies created for other hazards based on local conditions and needs.

STRUCTURES, CRITICAL FACILITIES, INFRASTRUCTURE, AND OTHER ASSETS			
HOMES	Home	NATURAL INFRASTRUCTURE	Lake/Pond
COMMUNITY RESOURCES	Cemetery		Reservoir
	Commercial Business		Playa
	Library		Riparian Area
	Place of Worship		Spring/Seep
	University/College		Stream/River
GOVERNMENT FACILITIES	School	OTHER INFRASTRUCTURE	Wetland
	Correctional Facility		Communication Towers
	Military Facility		Microwave Service Towers
	Post Office		Gas Station
RECREATION AMENITIES	Town Hall		Sewer Pipeline
	Campground/Recreation Facility		Wastewater Facility
	Golf Course		Contaminated Land
	Public Areas		Hazmat Material Storage
	Historic Site	TRANSPORTATION INFRASTRUCTURE	Mines
	Museum		Broadband Anchors
	State Park		Solid Waste Facility
EMERGENCY SERVICES	Park		Airport/Heliport
	Trail	WATER INFRASTRUCTURE	Bridge/Culvert/Underpass
	Emergency Medical Service		Railroad
	Emergency Operations Center/PSAP		Emergency Outlet Roads
	Fire Station		Road
	Hospital/Health Care Facility	AGRICULTURAL RESOURCES	Canal
ENERGY INFRASTRUCTURE	National System Shelter Facility		Culinary Water Pipeline
	Law Enforcement Station		Culinary Water Source
	Substation/Regulator		Water Tank
	Natural Gas Pipeline		Dam
	Crude Oil Pipeline		Groundwater Recharge
	Oil and Gas Well		Groundwater Protection and Transient NC Zones
	Petroleum Pipeline		Well
	Hydrogen Sulfide Pipeline		Farmland
	Power Generation Facility		Grazing Allotments
	Transmission Line		

A comprehensive list of structures, critical facilities, infrastructure, and other assets analyzed in the 2020 Bear River Region Pre-Disaster Mitigation Plan.

infrastructure (ex: roads, water lines, wells), and other assets/amenities (ex: natural areas, groundwater protection zones, agricultural lands) included in local community risk assessments.

To identify the types and locations of these datasets, BRAG staff relied heavily on county working group members to define what types of data were needed, and to verify the location of the most critical

facilities and community assets. BRAG staff also collected large quantities of GIS data from local, state and federal agencies, data clearinghouses (Including Utah AGRC), and many other sources. Other datasets were digitized as needed if not available.

Community Asset Data:

- **Point data** (64,061 residential/commercial & 9,078 critical facility points - 73,139 total)

- **Line data** (19,207 miles)
- **Polygon data** (4,804,951 acres)

Note: Not all assets were located in all jurisdictions. For example, some communities wanted water and sewer main lines included in their analysis, while others did not. All datasets were not available for all jurisdictions. As such, potential losses, in many cases, could be higher for certain hazards in certain communities, than are documented in this plan.

Risk assessment methodology

BRAG staff utilized Geographic Information Systems (GIS) software for analyzing potential losses to local communities from various natural hazards in the Bear River Region. This was only done for those hazards that had available GIS data. A relatively simple and time-tested methodology of overlay analysis was utilized for these community assessments (see graphic below for a simplified version). In an overlay analysis, various datasets are overlaid on one another, and data is extracted from where those datasets share a common geographic location. Data can be extracted by these locations and quantified or categorized, resulting in a better understanding of that geographic area based on those particular datasets. See APPENDIX D for a more detailed description of the GIS-based risk assessment methodology for this plan update.

Other hazards without available GIS data were also analyzed to determine risk. This analysis was much more qualitative in nature, and considered overall exposure, probability, and severity for each hazard and for each county, respectively. For information

The basic steps involved in the GIS-based risk assessment analyses for this plan update:

1. Data preparation (existing and/or created)
2. Consolidate data by type and re-format (to create uniformity across multiple datasets and types)
3. Extract community point, line, and polygon asset data by natural hazard layer per each municipality or county
4. Calculate potential loss values by asset type for each community

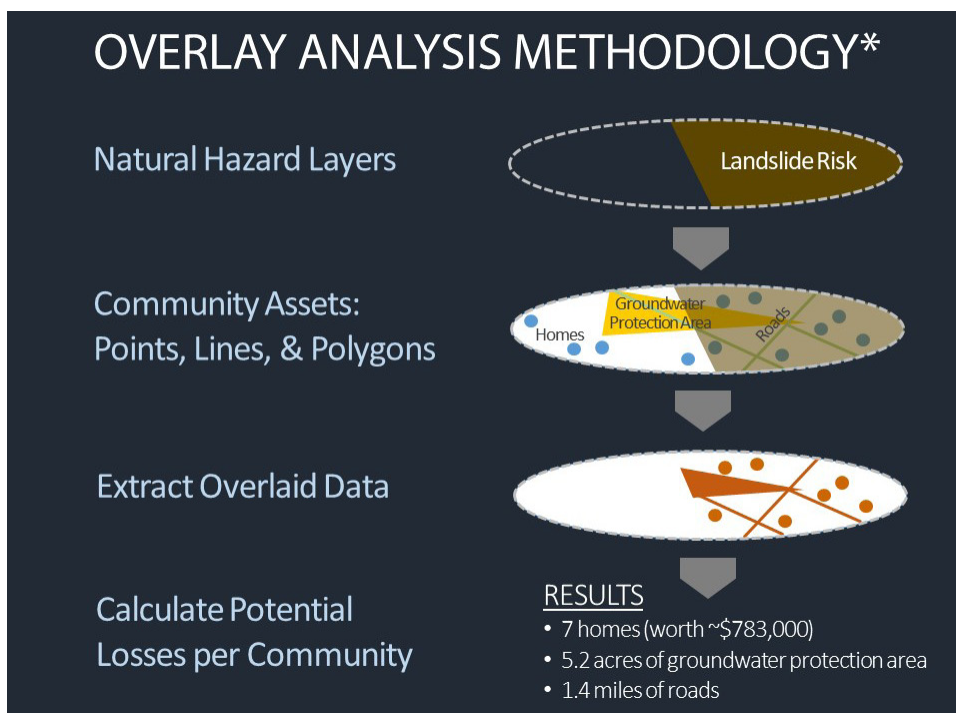
on how non-GIS hazard risks were determined, see county risk matrices and summaries in the Hazard Risks and Profiles section.

Note: Local county working group members felt that sensitive critical facility, infrastructure, and other related data should not be shared with the public for safety and security reasons. To address their concerns, all analysis was performed in-house by BRAG GIS and vetted during county working group meetings. If interested in viewing or obtaining GIS data from this plan update, contact each respective emergency manager for Box Elder, Cache, or Rich Counties.

Creating and prioritizing mitigation strategies

After completing community-level risk assessments for all 42 jurisdictions in the Bear River Region, potential losses were then calculated by asset type. Mitigation strategies meetings were held with county working groups, where presentations were given on how to create effective mitigation strategies for various hazards. BRAG staff then created individual mitigation strategies packets for each jurisdiction and e-mailed a fillable digital file to community leaders and staff to fill out. Each packet had mitigation strategies sections to address each hazard in their respective community.

BRAG staff provided assistance to officials and staff as needed in person, by e-mail, and over the phone or video calls. When completed, packets were then sent back to BRAG and integrated into this plan.



Basic risk assessment overlay analysis methodology for the 2020 Bear River Region Pre-Disaster Mitigation Plan. For a more detailed methodology and details on GIS datasets utilized for this plan, see Appendix D and Appendix E, respectively.

After reviewing a list of mitigation strategies from 2015, some communities decided to keep the same strategies from that plan, since local conditions have not changed substantially since that time, and/or strategies were not yet implemented for various reasons.

Click on the “Community Sections” tab at the top to see mitigation strategies for each community.

A guiding factor in prioritizing mitigation strategies was the principle that mitigation should provide the greatest amount of good to the greatest number of people, after considering resources, staffing, and other constraints. Recurrence intervals, past events, and damage estimates compiled during the risk assessment in this plan were also considered. Overall, each community individually considered their own capabilities and resources as they prioritized each strategy.

As part of the process for creating implementation strategies for this plan update, each community also reviewed their strategies list from the 2016 plan, and recorded which strategies were implemented over the past 5 years, if any. After reviewing their strategies from 2016, some communities determined to keep and/or modify those strategies in an effort to try to implement those in the upcoming 5 years. However, some communities have taken great strides in reducing losses through strategy implementation. Some examples of these implemented strategies include:

Creation of Community Wildfire

Protection Plans (CWPP)
Improved fire regulations
Purchase of back-up generators
Flood reduction measures such as culverts and retention basins
Improved floodplain and other hazards GIS data
Improved training for local emergency response and fire crews

and better equipment
Updates of local ordinances to help reduce risks to future development
Click [HERE](#) to see a community-specific, regional list of all mitigation strategies implemented from the 2016 plan.

NFIP participation and compliance

COMMUNITIES PARTICIPATING IN NFIP - 2020	
Jurisdiction	County
BEAR RIVER, CITY OF	BOX ELDER COUNTY
BOX ELDER COUNTY	BOX ELDER COUNTY
BRIGHAM CITY, CITY OF	BOX ELDER COUNTY
CORINNE, CITY OF	BOX ELDER COUNTY
GARLAND, CITY OF	BOX ELDER COUNTY
HONEYVILLE, CITY OF	BOX ELDER COUNTY
MANTUA, TOWN OF	BOX ELDER COUNTY
PERRY CITY, CITY OF	BOX ELDER COUNTY
TREMONTON, CITY OF	BOX ELDER COUNTY
WILLARD, CITY OF	BOX ELDER COUNTY
CACHE COUNTY	CACHE COUNTY
CLARKSTON, TOWN OF	CACHE COUNTY
HYDE PARK, TOWN OF	CACHE COUNTY
HYRUM, CITY OF	CACHE COUNTY
LEWISTON, CITY OF	CACHE COUNTY
LOGAN, CITY OF	CACHE COUNTY
MENDON, CITY OF	CACHE COUNTY
MILLVILLE, TOWN OF	CACHE COUNTY
NEWTON, TOWN OF	CACHE COUNTY
NIBLEY, TOWN OF	CACHE COUNTY
NORTH LOGAN, CITY OF	CACHE COUNTY
PARADISE, TOWN OF	CACHE COUNTY
PROVIDENCE, CITY OF	CACHE COUNTY
RICHMOND, CITY OF	CACHE COUNTY
RIVER HEIGHTS, CITY OF	CACHE COUNTY
SMITHFIELD, CITY OF	CACHE COUNTY
WELLSVILLE, CITY OF	CACHE COUNTY
LAKETOWN, TOWN OF	RICH COUNTY
RICH COUNTY	RICH COUNTY
WOODRUFF, TOWN OF	RICH COUNTY

The National Flood Insurance Program (NFIP) was created to reduce losses from flood events and to provide more affordable flood insurance options. Local governments can join NFIP for free, even if they do not have FEMA 100-year floodplain mapping. This allows local residents to purchase flood insurance if they are concerned about flood risks for their home.

During the planning process, Floodplain Administrators (FPA's) were invited to local working group meetings via local elected and

NFIP repetitive loss structures

Occasionally, the same home or business suffers damages from a flood year after year. Structures that are located in the FEMA 100-year floodplain, have insurance under NFIP, and suffer damages from flooding year after year, are considered, "repetitive loss" properties.

As of September 14, 2020, Box Elder County has zero repetitive loss properties; Cache County has 10; and Rich County has zero.

COMMUNITIES <u>NOT</u> PARTICIPATING IN NFIP - 2020	
Jurisdiction	County
AMALGA, TOWN OF	CACHE COUNTY
CORNISH, TOWN OF	CACHE COUNTY
DEWEYVILLE, CITY OF	BOX ELDER COUNTY
ELWOOD, CITY OF	BOX ELDER COUNTY
FIELDING, TOWN OF	BOX ELDER COUNTY
HOWELL, CITY OF	BOX ELDER COUNTY
PLYMOUTH, TOWN OF	BOX ELDER COUNTY
PORTAGE, CITY OF	BOX ELDER COUNTY
SNOWVILLE, TOWN OF	BOX ELDER COUNTY
TRENTON, TOWN OF	CACHE COUNTY

appointed officials and community staff, many of which are currently serving in that capacity in addition to other duties. Communities in the Bear River Region participating in the NFIP are consistently working towards NFIP compliance, and education and training is ongoing as coordinated and provided by the State Floodplain Manager. Additionally, BRAG staff will continue to work with local governments to provide additional training and resources, to help them reduce losses and comply with NFIP.



Writing the Plan and Plan Adoption

Though professional planning staff at Bear River Association of Governments (BRAG) oversaw this plan update process and created the online plan and plan document, they did so with extensive input from:

- County emergency managers
 - City and town emergency managers
 - Elected and appointed officials
 - Local planners
 - City managers/administrators
 - Public works
 - Local engineers
 - Town and city clerks
 - State and federal agencies and land management representatives
 - Natural hazards experts
 - The general public
- ...and many others

Throughout the entire planning process, BRAG staff worked to incorporate new ideas, values, and priorities into the plan. Input from local working group members, the public, elected officials, and others were highly valued, and greatly informed the planning process. This includes comments from stakeholders on working group make-up and membership, risk assessment data and methodologies, mitigation strategy ideas and training, and even the final format of this plan.

This plan was also created on the coat tails of past BRAG planners and planning interns who, over the years, have helped to improve the plan, including updated layout and design, GIS analysis methodologies, and community outreach tools and techniques. BRAG's fifteen-member Governing Board also provided oversight and support throughout the entire planning process.

BRAG staff who have worked on various elements of this plan include:

- *Zac Covington, Sr. Regional Planner and Project Manager*
- *Scott McComb, Regional Planner*
- *Lara Gale, Regional Planning Intern*

Plan adoption and FEMA approval

Following the completion of this online plan and FEMA approval, a hard copy was available at the BRAG office for those interested in looking at the plan in that format.

After a 30-day public comment period on the online plan, comments from local communities, the public, county working group members, as well as the Utah Division of Emergency Services were integrated into the draft. The plan was then sent to FEMA Region VIII for review.

After revisions to the draft plan were completed, letters were sent to each local jurisdiction in the Bear River Region explaining the benefits of adopting a FEMA-approved plan. Blank promulgation forms were then sent to the

chief elected official for each jurisdiction, and communities were encouraged to adopt the plan and send the completed promulgation forms to BRAG for inclusion in the plan. Hard copies of the plan were also made available to all participating jurisdictions by request.

Updating the plan

The plan will be monitored, evaluated, and updated by BRAG staff annually, or on an as-needed basis, depending on the current need. These updates could include adding new or revising current mitigation strategies, integrating more recent plans and/or studies, utilizing better GIS data, or other necessary updates. As need dictates, local jurisdictions, the BRAG Governing Board, or other participating organizations can request updates to the plan as necessary.

Likewise, local communities are encouraged to have ongoing and regular discussions with the public regarding local hazards and potential mitigation strategies to reduce losses in their county, city, or town. This input can be integrated into the plan directly through plan amendments and adoption of the updated plan as needs dictate.

If the plan is amended, each affected participating jurisdiction will be required to hold a public meeting to re-adopt the amended plan by resolution.

Contingent on funding, this plan will also be updated on a regular basis every 5 years according to FEMA requirements for approved plans.

(LOCAL COMMUNITY)
Utah

RESOLUTION NO. _____

A RESOLUTION OF (LOCAL COMMUNITY) ADOPTING THE 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN

WHEREAS (local governing body) recognizes the threat that natural hazards pose to people and property within (local community); and

WHEREAS (local community) has participated in the creation of a multi-hazard mitigation plan, hereby known as the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in (local community) from the impacts of future hazards and disasters; and

WHEREAS adoption by (local governing body) demonstrates their commitment to hazard mitigation and achieving the goals outlined in the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN.

NOW THEREFORE, BE IT RESOLVED BY (LOCAL COMMUNITY), Utah, THAT:

In accordance with (local rule for adopting resolutions), (local governing body) adopts the 2020 BEAR RIVER REGION, UTAH PRE-DISASTER MITIGATION PLAN.

This resolution shall be effective on the date it is adopted.

DATED this _____ day of _____, 2020/2021.

Signed

Printed Name and Title

Jurisdiction Name

ATTEST

Name/Title

Basic resolution template for adopting the 2020 Bear River Region Pre-Disaster Mitigation Plan, adapted from a basic FEMA template.



Photo of the 2016 Peterson Hollow fire courtesy of the USFS Logan Ranger District

Hazard Risks and Profiles

HAZARDS - GIS DATA	HAZARDS - NO GIS DATA
Avalanche Terrain	Air Quality
Dam Failure	Alluvial Fans
Flood (FEMA 100-Year)	Climate Change
Flood (Soils/Purdue)	Drought
Flood (Valley Bottom)	Insect Infestation/Plant Disease
Geologic Faults (Quaternary)	Radon
Landslide	Severe Weather
Liquefaction	Tornado
Steep Slopes	Seiche
Problem Soils (Struct. w/ Basements)	Volcanic
Problem Soils (Struct. w/o Basements)	Seasonal Population Growth
Wildfire (Utah FFSL)	*Pandemics
Wildfire (US Forest Service)	

Natural hazards in the Bear River Region

The table above shows natural hazards identified in the Bear River Region. Some of these hazards were mapped using currently available GIS data (left column), while others did not have GIS data (right column). For more information on potential risks from hazards without GIS data, read the county hazard risk profiles later in this section.

Natural hazards and historical hazard events and maps

To access interactive webmaps showing natural hazards in the Bear River Region, as well as historical hazard events, visit the web-version of this plan at: <https://brag.maps.arcgis.com/apps/MapSeries/index.html?appid=fc507e02862e42cbbf627437c1658549>.

Likewise, an extensive database of historical hazard events was

compiled as part of this planning process. This database includes information on:

- Avalanches from 2010 to 2020
- Hail storms from 1955 to 2018
- High wind paths from 1950 to 2018
- Tornado paths from 1950 to 2018
- Earthquake epicenters from 1850 to 2016
- Wildfires from 1992 to 2015 (two datasets)
- Long-term drought averaged from 1895 to 2012
- Ag. production
- Drought
- Population growth
- Grasshoppers/crickets
- Tornadoes
- Air Quality
- Floods
- Landslides
- Radon

See **Appendix F** for more details.

For the purpose of this planning document, the following pages show hazards mapped on a regional scale, including a

paragraph or two with summaries about each hazard (those with GIS data). For individual community risk assessments which provide

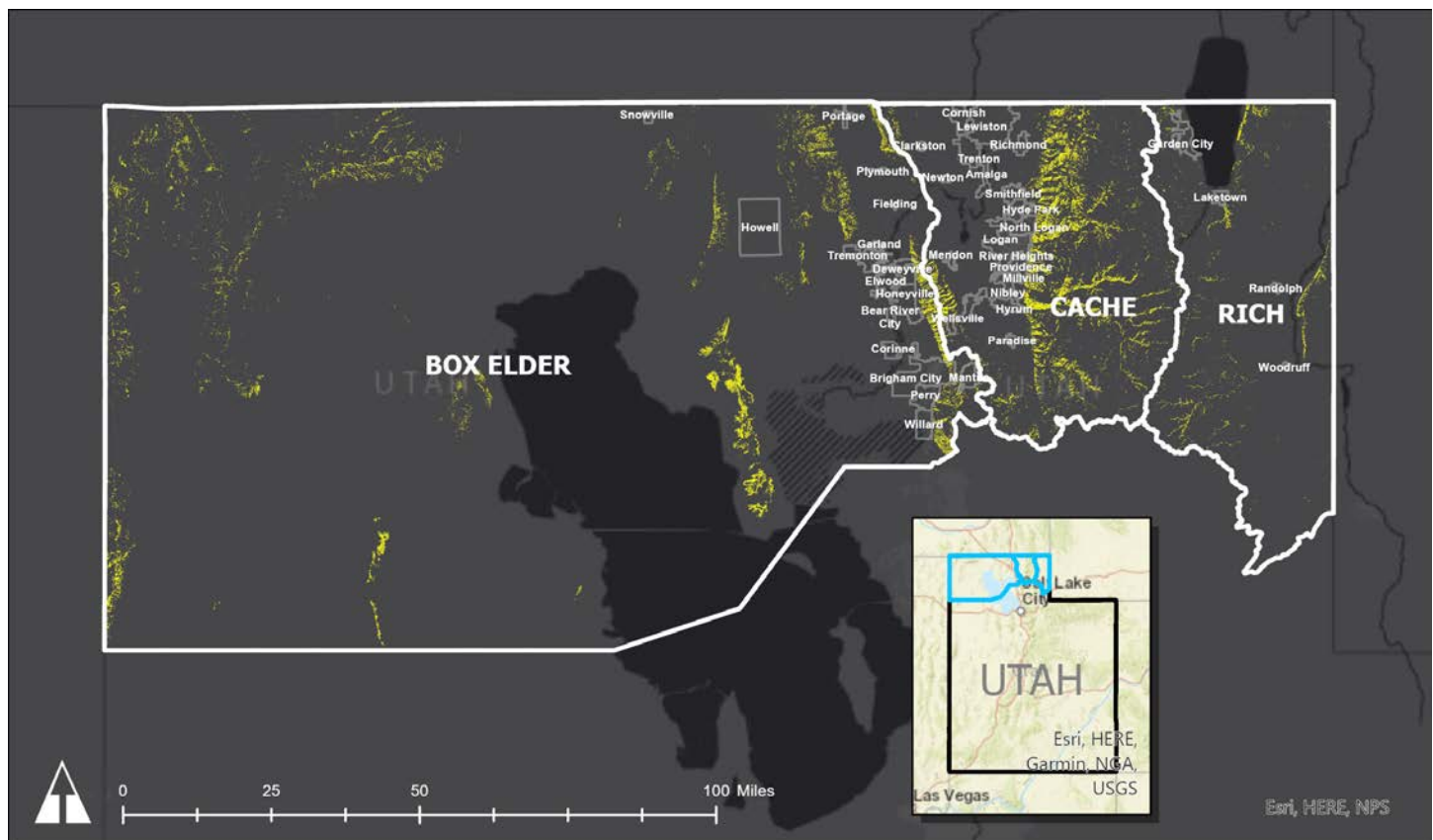
community-level mapping and risk information, visit the online plan at the above web address.

AVALANCHE

Hazard Description: An avalanche is a mass of snow, ice, and debris that slides rapidly down steep mountain slopes at speeds up to 80 mph when triggered by ground shaking, sound, or movement. Dry or slab avalanches are the most common and the deadliest in Utah. They are triggered when heavy snow is rapidly added to weaker layers. Wet avalanches occur during spring thaw events.

Avalanches pose a significant hazard in Utah's mountains between the months of January and April, seasons of heavy snow accumulation and unstable snowpack conditions. Weather, terrain, topography, and snow conditions also impact avalanche activity.

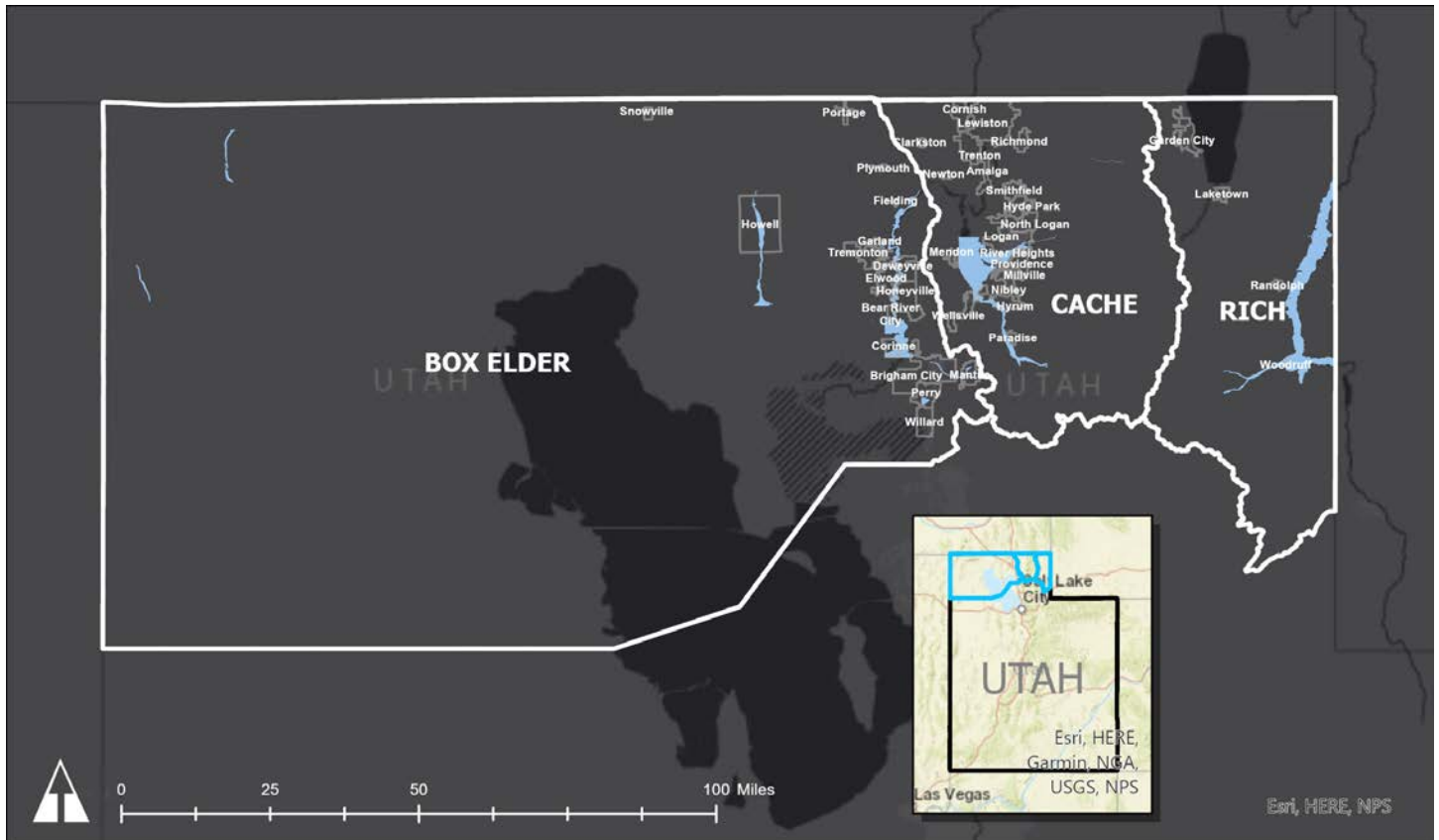
Map Description: This map display areas of avalanche terrain based on areas with slope between 35° to 40°, low profile and bare ground vegetation, and elevation above 5,500 feet.



DAM FAILURE

Hazard Description: A dam failure or dam burst is the sudden, rapid, and uncontrolled release of impounded water or the likelihood of such an uncontrolled release. Dams can fail for one or more of the following reasons: (1) overtopping caused by floods that exceed the capacity of the dam; (2) deliberate acts of sabotage; (3) structural failure of materials used in dam construction; (3) movement and/or failure of the foundation supporting the dam; (4) settlement and cracking of concrete or embankment dam; (5) piping and internal erosion of soil in embankments; and (6) inadequate maintenance and upkeep. See also Flood.

Map Description: This map displays areas of inundation for all high hazard dams under the Utah Division of Water Rights as well as the location of dams. For more information visit: <https://www.waterrights.utah.gov/gisinfo/wrcover.asp>

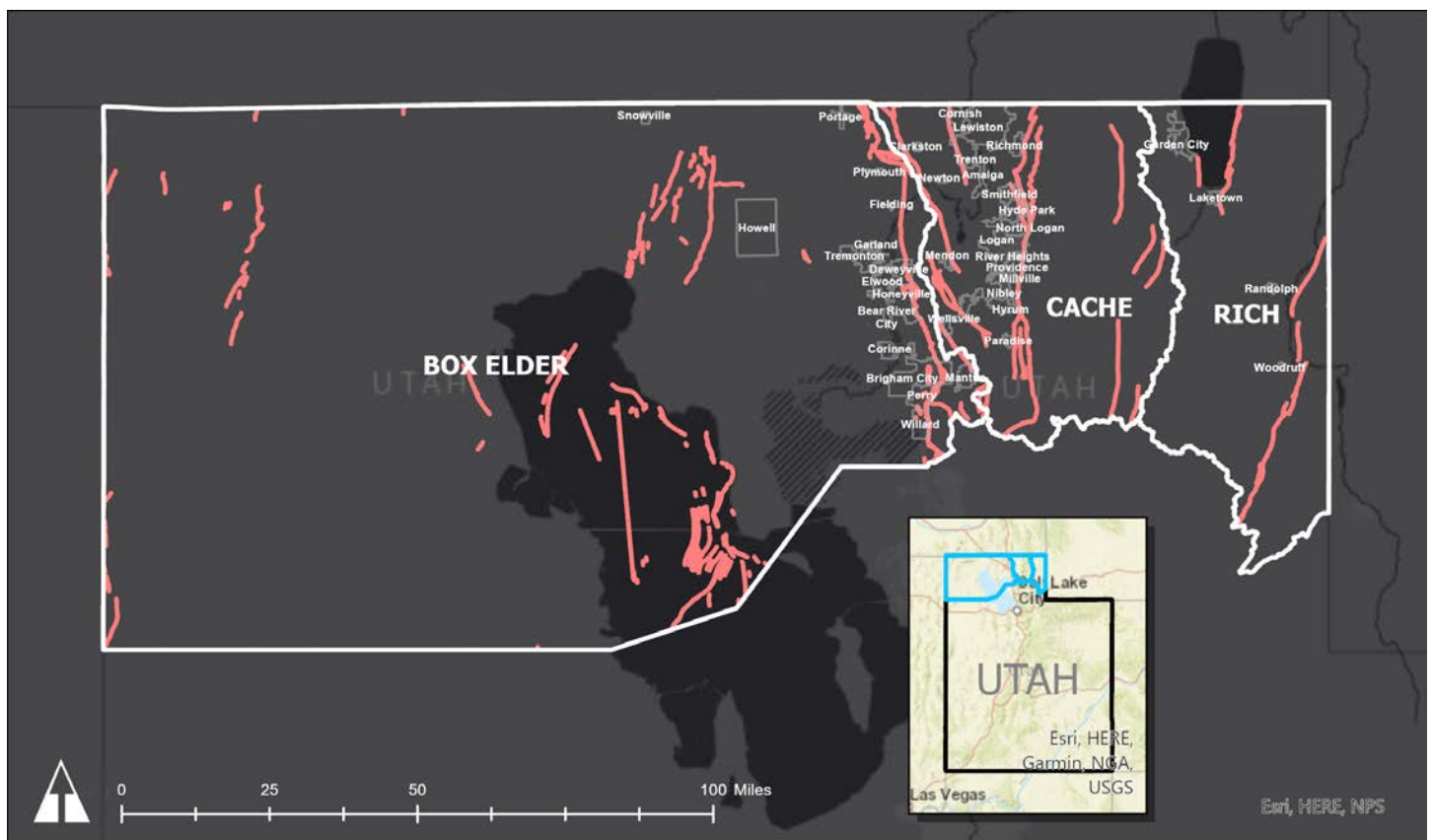


EARTHQUAKE/FAULTS

Hazard Description: Any sudden shaking of the ground caused by seismic waves through the Earth's rocks constitutes an earthquake. Seismic waves are produced when some form of energy stored in Earth's crust is suddenly released, usually when masses of rock straining against one another suddenly fracture and "slip." Earthquakes occur most often along geologic faults, narrow zones where rock masses move in relation to one another. The major fault lines of the world are located at the fringes of the huge tectonic plates that make up Earth's crust.

Certain saturated soft soil can take on the characteristics of a fluid when shaken by an earthquake, resulting in a state called liquefaction. Amplified shaking also results in areas of "soft soils" which includes fill, loose sand, waterfront, and lake bed clays.

Map Description: This map displays the earthquake damage zone (1,500 foot buffer on either side of the quaternary fault) as recommended by the Utah Geological Survey. For more information visit: <https://geology.utah.gov/apps/qfaults/index.html>

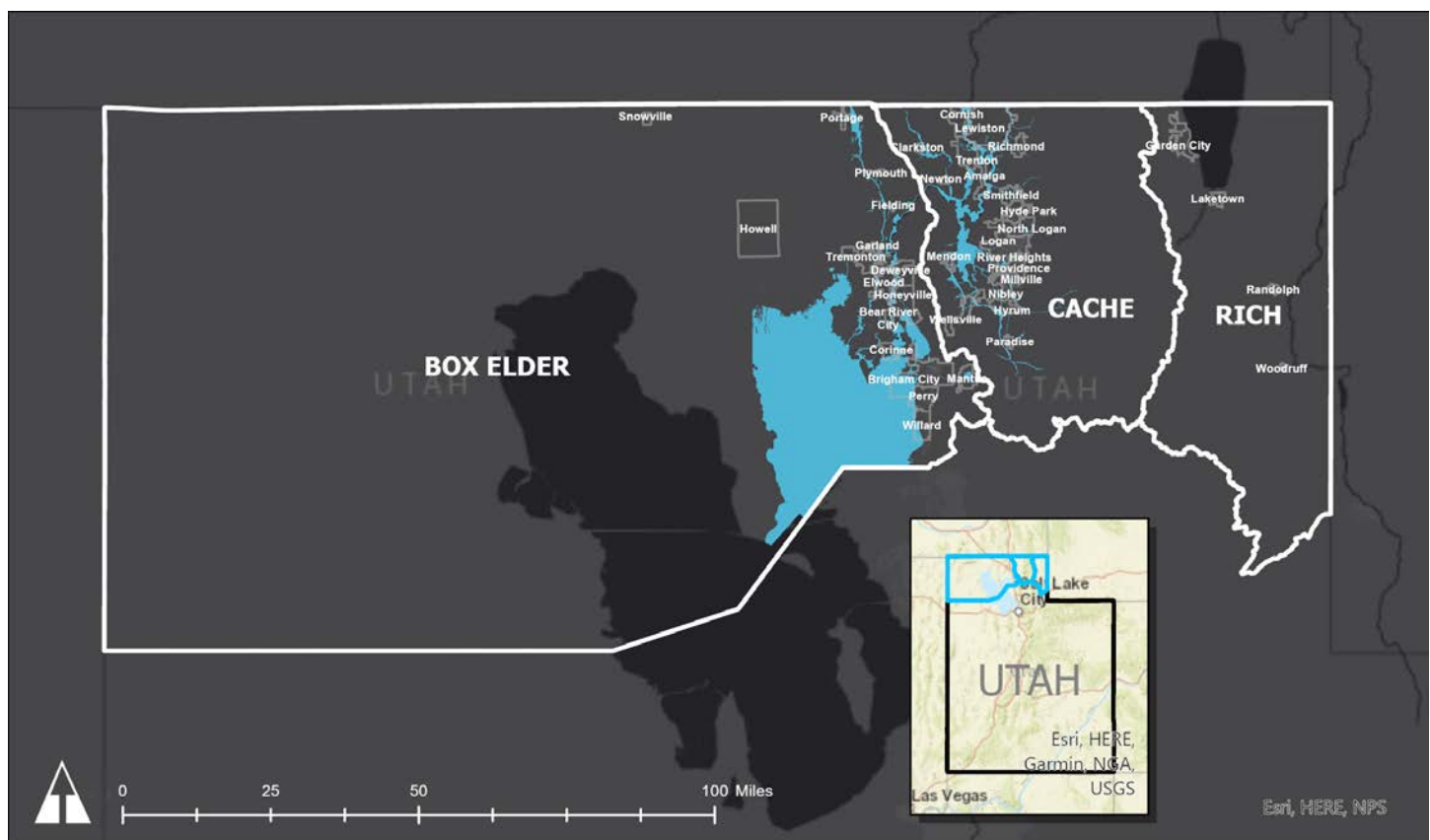


FLOOD - FEMA

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100- year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: This map displays the FEMA identified 100 year floodplain. For more information visit: <https://msc.fema.gov/portal/home>

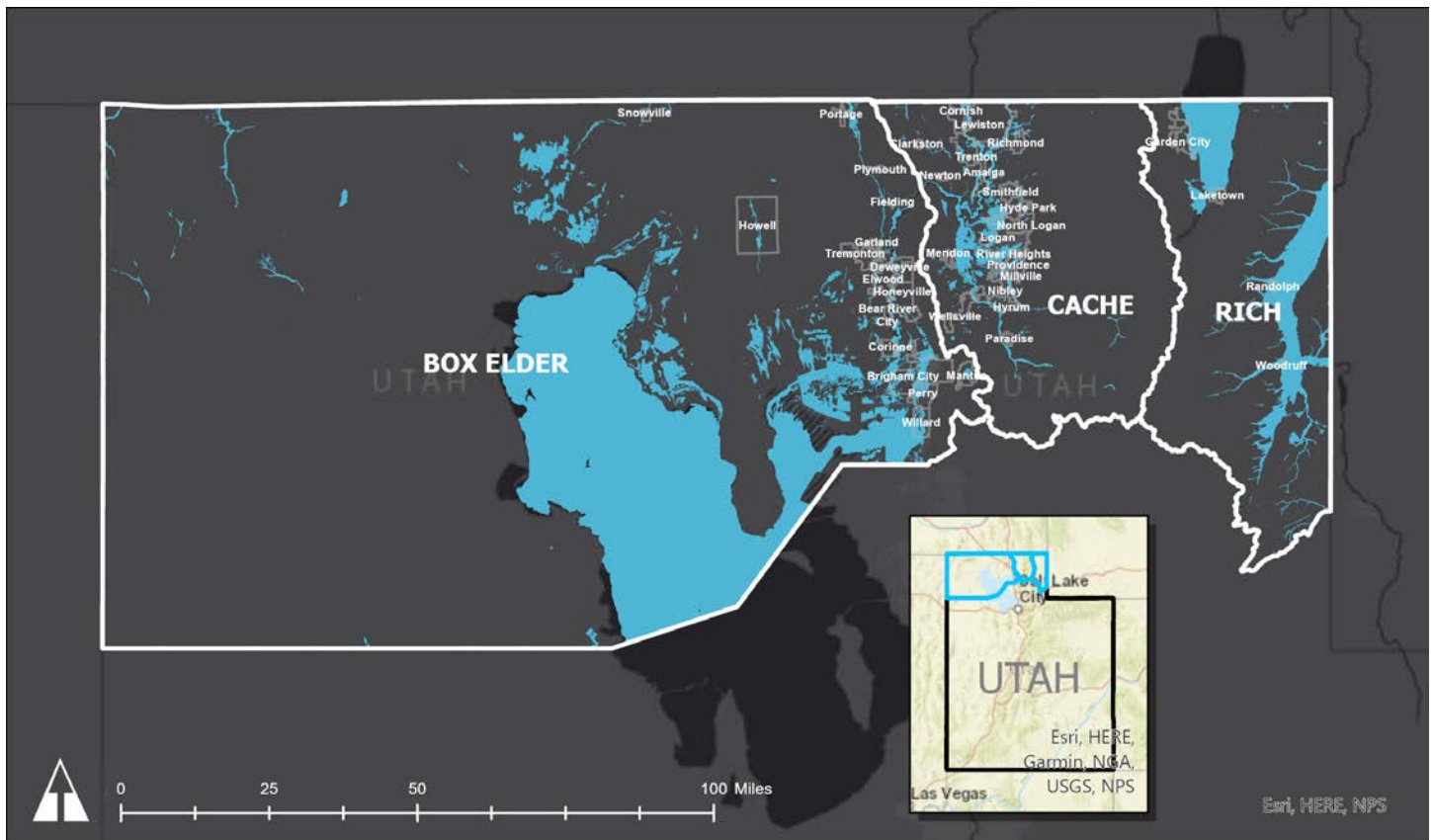


FLOOD - SOIL

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100-year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: This map displays the 100 year floodplain based on NRCS soil survey data (<https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/>) and was identified based on research by Sangway and Merwade (<https://onlinelibrary.wiley.com/doi/abs/10.1111/1752-1688.12306>).

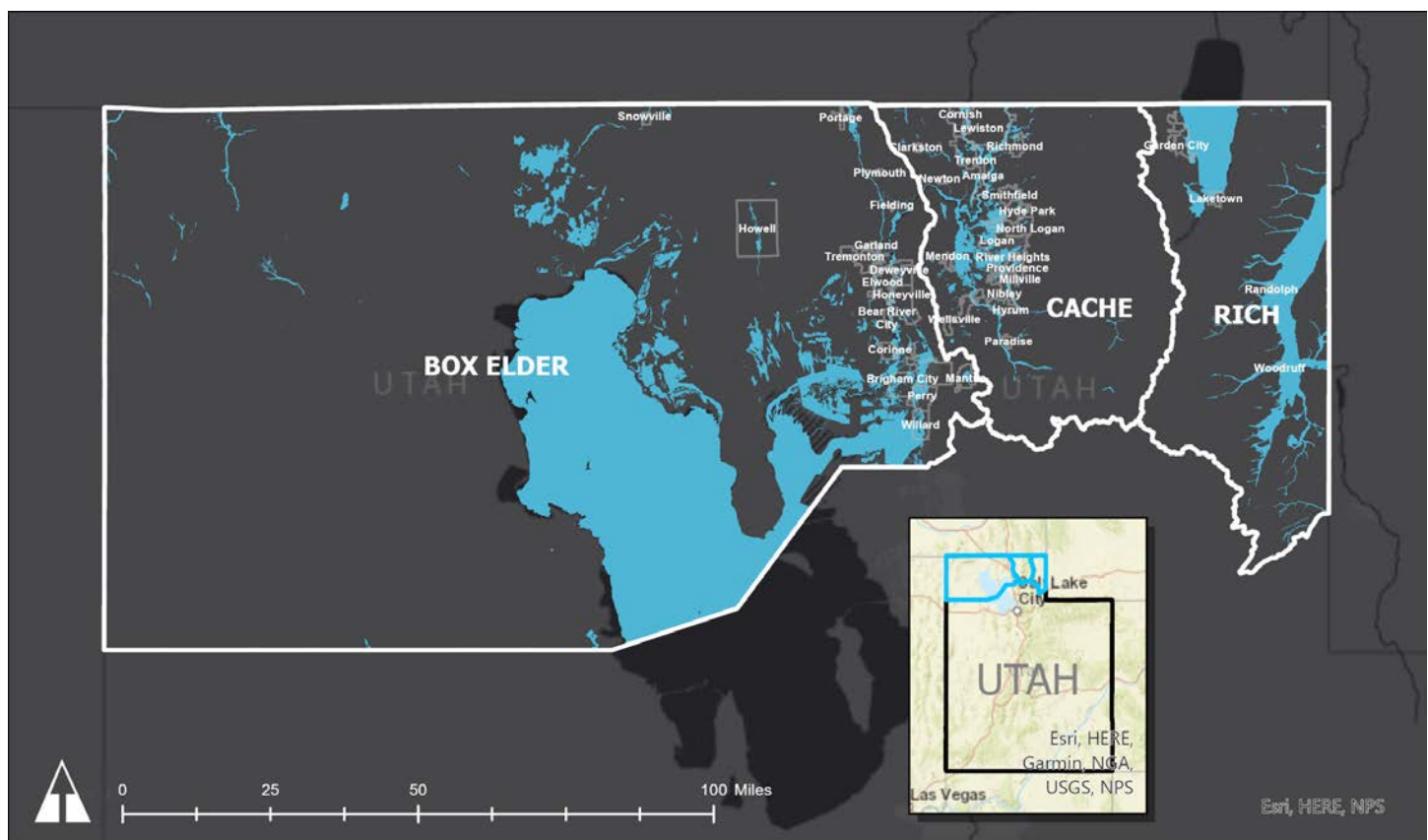


FLOOD - VALLEY BOTTOM

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100-year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: The valley bottom map displays the potential flood plains based on stream networks and elevation data (<https://databasin.org/datasets/95a24aeef6a24996bf8082090fdbd831>).

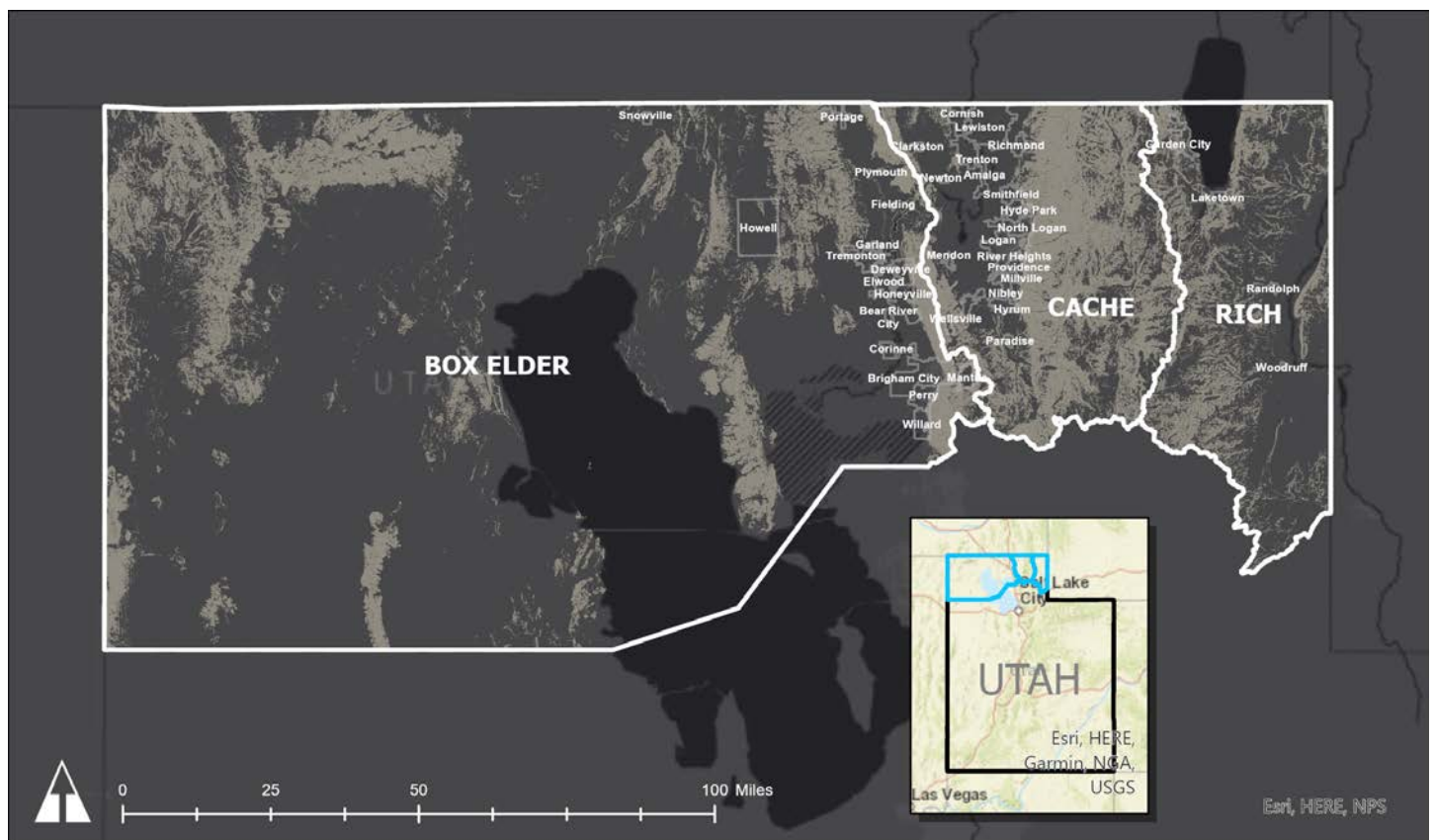


LANDSLIDE

Hazard Description: A landslide is the movement of a mass of rock, debris, or earth down a slope by force of gravity. They flow rapidly, striking at avalanche speeds that can travel several miles, growing in size as they pick up trees, boulders, cars and other materials.

Landslides occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, volcanic eruptions, erosion, fire, or additional human-induced activities. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high. However, landslides can occur with very little slope, sometimes classified as earth slumping or earth flow.

Hazard Description: This map displays moderate to high landslide susceptibility based on research completed by Utah Geological Survey geologists. For more information visit: <https://ugspub.nr.utah.gov/publications/maps/m-228/m-228.pdf>

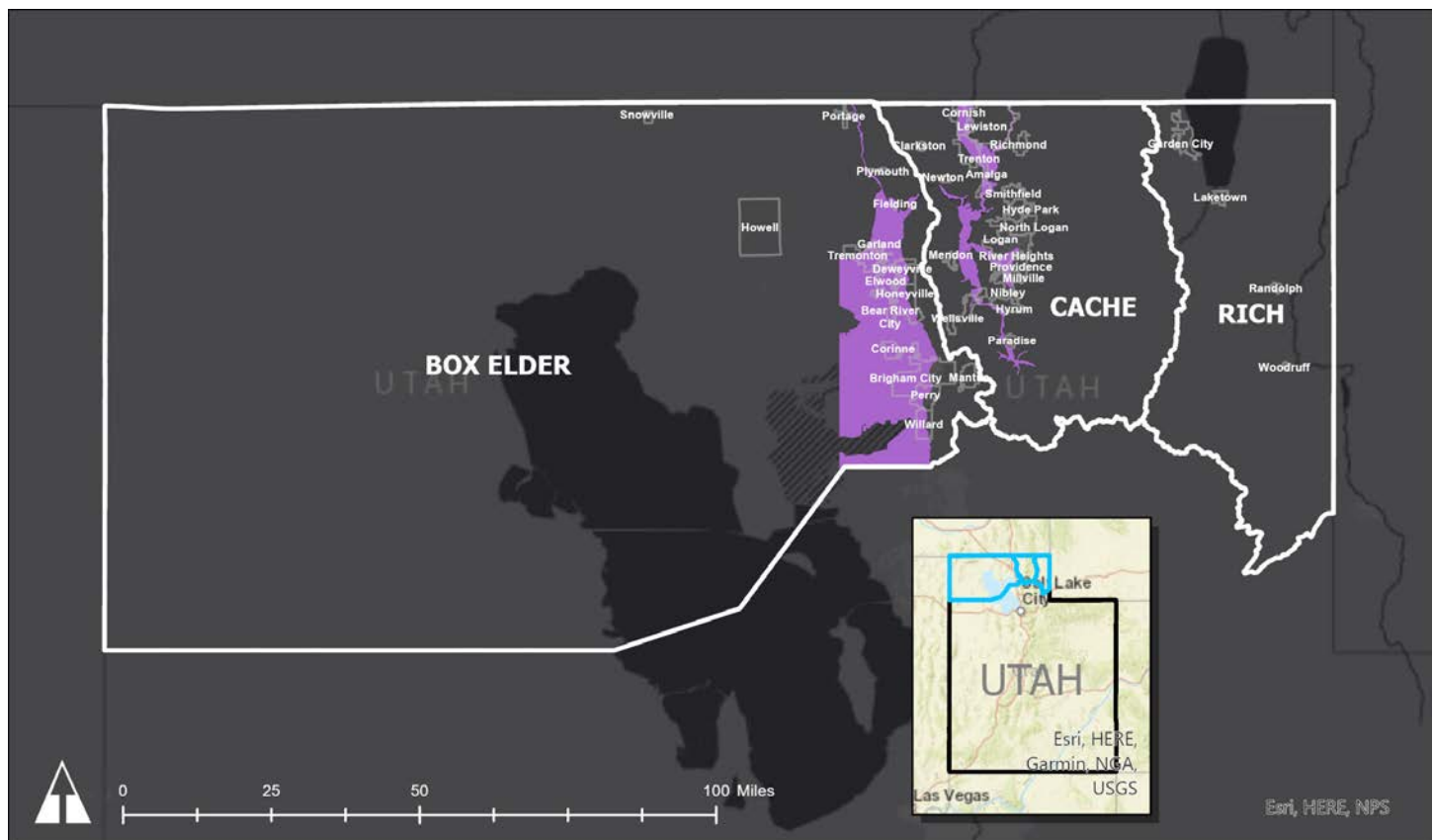


LIQUEFACTION

Hazard Description: Liquefaction occurs when soils that are saturated with water temporarily lose their ability to hold their structure, acting more like a viscous liquid than a solid. It mostly occurs during an earthquake and can damage anything on or in the ground, including buildings and other structures, roads, sewer and water lines, and other infrastructure.

Two conditions must be present in order for liquefaction to occur: 1) The soil must be susceptible to liquefaction, which are most often shallow (0-30 feet), and loose/sandy soils; and, 2) There must be ground shaking (such as during an earthquake) that is strong enough to loosen the soil structure.

Hazard Description: This map displays moderate to high liquefaction potential based on research completed by Utah Geological Survey geologists. For more information visit: <https://geology.utah.gov/hazards/earthquakes/liquefaction/>

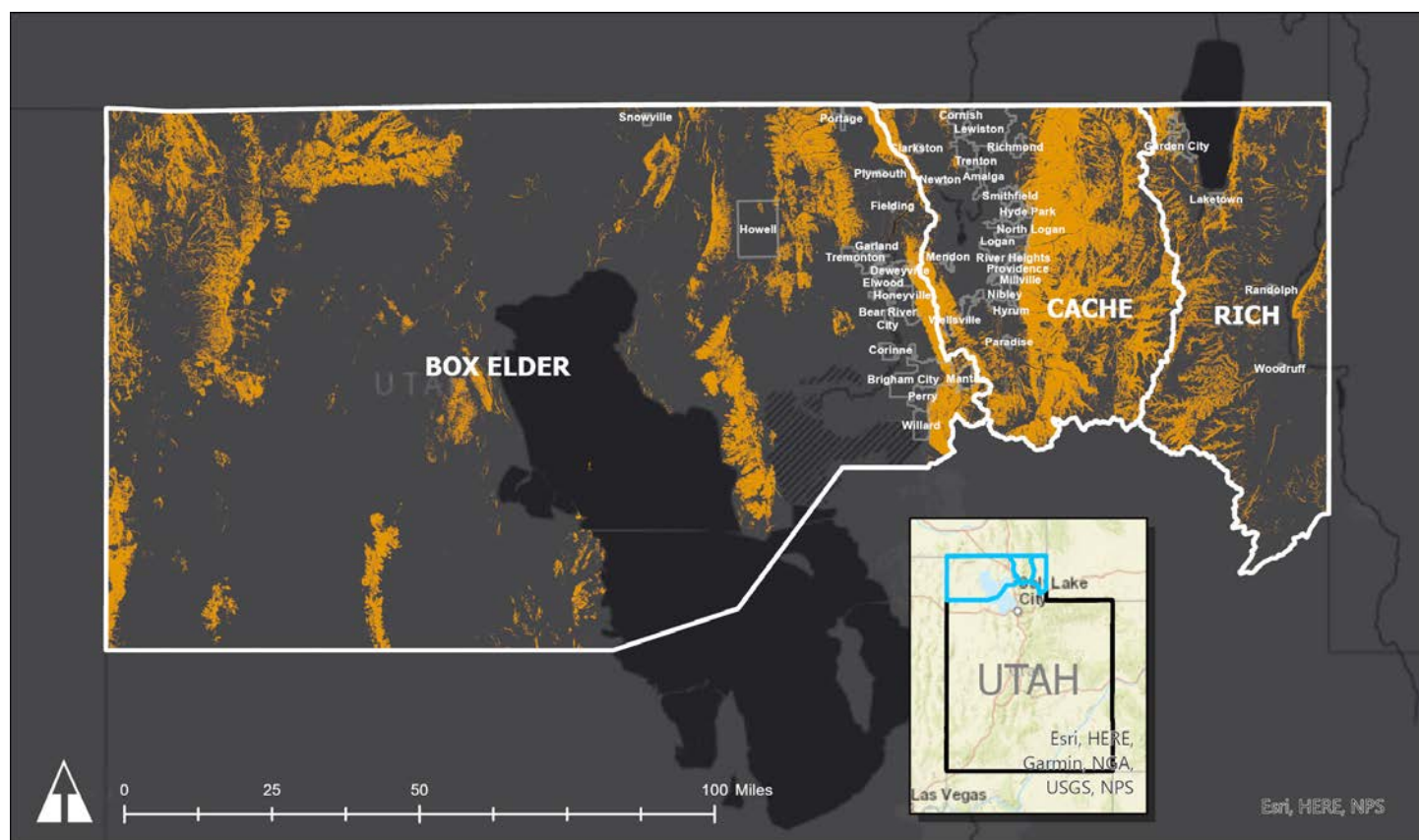


STEEP SLOPE

Hazard Description: A landslide is the movement of a mass of rock, debris, or earth down a slope by force of gravity. They flow rapidly, striking at avalanche speeds that can travel several miles, growing in size as they pick up trees, boulders, cars and other materials.

Landslides occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, volcanic eruptions, erosion, fire, or additional human-induced activities. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high. However, landslides can occur with very little slope, sometimes classified as earth slumping or earth flow.

Hazard Description: This map displays areas of steep slopes (30 percent slope or greater) and was developed using the U.S. Geologic Survey National Elevation Dataset. For more information visit: <https://www.usgs.gov/core-science-systems/national-geospatial-program/national-map>



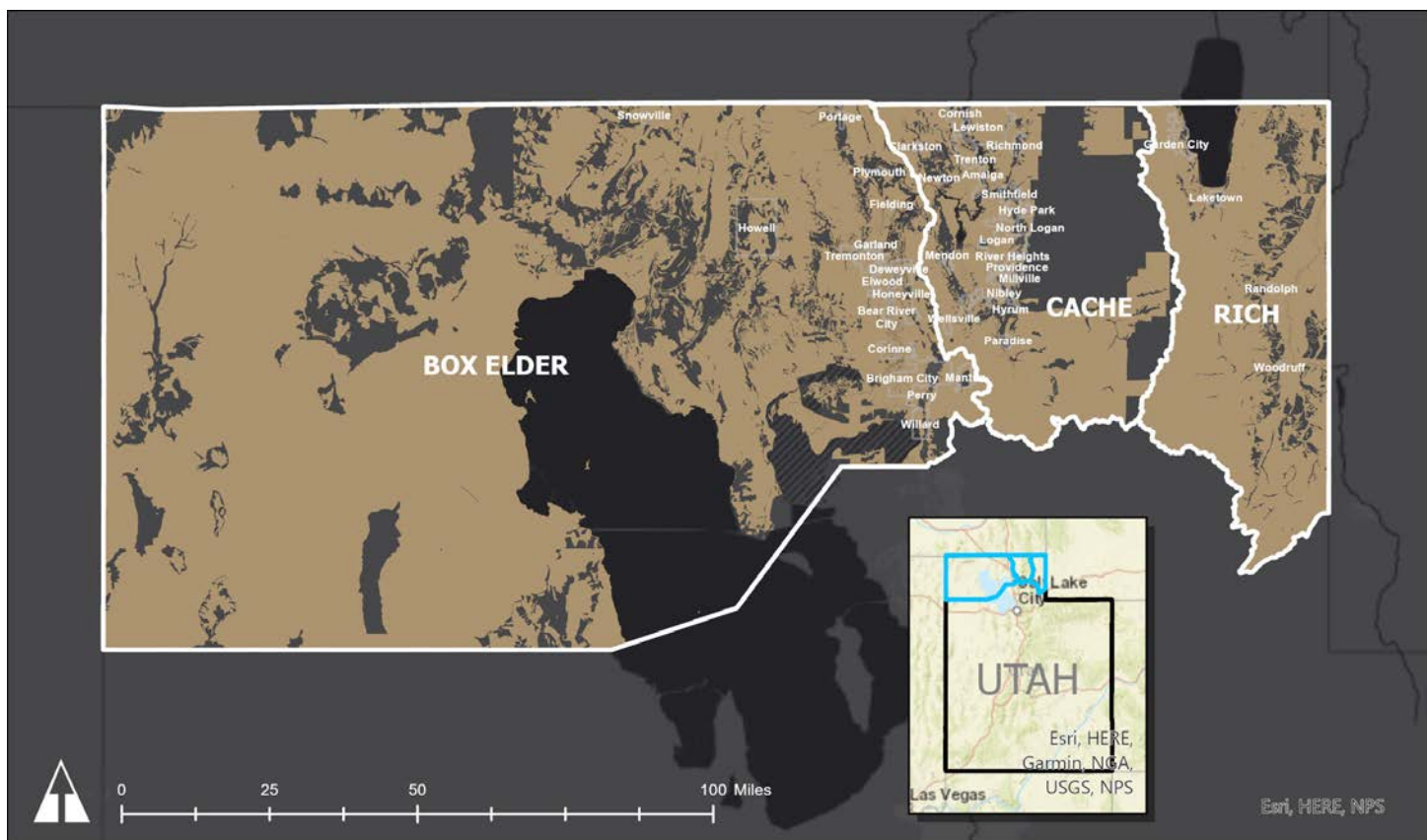
PROBLEM SOILS (WITH BASEMENTS)

Hazard Description: Problem soils are a group of hazards related to the specific properties of soils, and can include:

- Collapsible soil: Soils that have considerable strength when in a dry, natural state, but significantly settle due to hydrocompaction (reduction of air space within the soil) when wetted;
- Expansive soil: Soil with high clay content that swells when wet and shrinks when dried; and
- Subsidence : Sinking of the ground caused by groundwater depletion and/or underground mine subsidence or collapse

Problem soils can cause extensive damage to structures and foundations, and may also damage pavements after construction. They have caused an undetermined, but very significant amount of infrastructure damage and resulting economic impact.

Map Description: This map displays soils not suitable for dwellings with basements based on soil parameters (see reference section USDA SSURGO 1. Soils Not Suitable for Dwellings with Basements for more information).



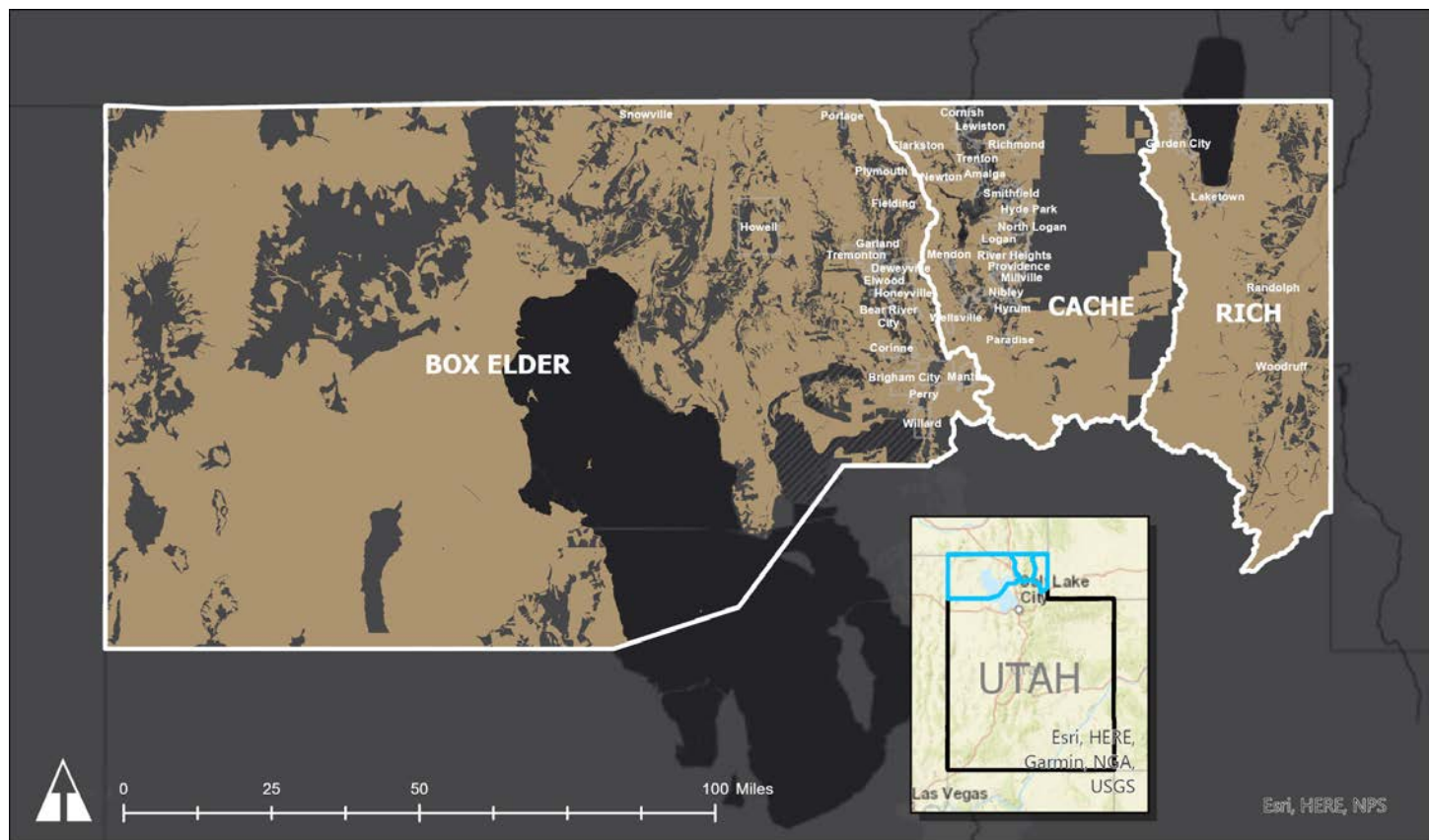
PROBLEM SOILS (WITHOUT BASEMENTS)

Hazard Description: Problem soils are a group of hazards related to the specific properties of soils, and can include:

- Collapsible soil: Soils that have considerable strength when in a dry, natural state, but significantly settle due to hydrocompaction (reduction of air space within the soil) when wetted;
- Expansive soil: Soil with high clay content that swells when wet and shrinks when dried; and
- Subsidence : Sinking of the ground caused by groundwater depletion and/or underground mine subsidence or collapse

Problem soils can cause extensive damage to structures and foundations, and may also damage pavements after construction. They have caused an undetermined, but very significant amount of infrastructure damage and resulting economic impact.

Map Description: This map displays soils not suitable for dwellings without basements based on soil parameters (see reference section USDA SSURGO 2. Soils Not Suitable for Dwellings without Basements for more information).

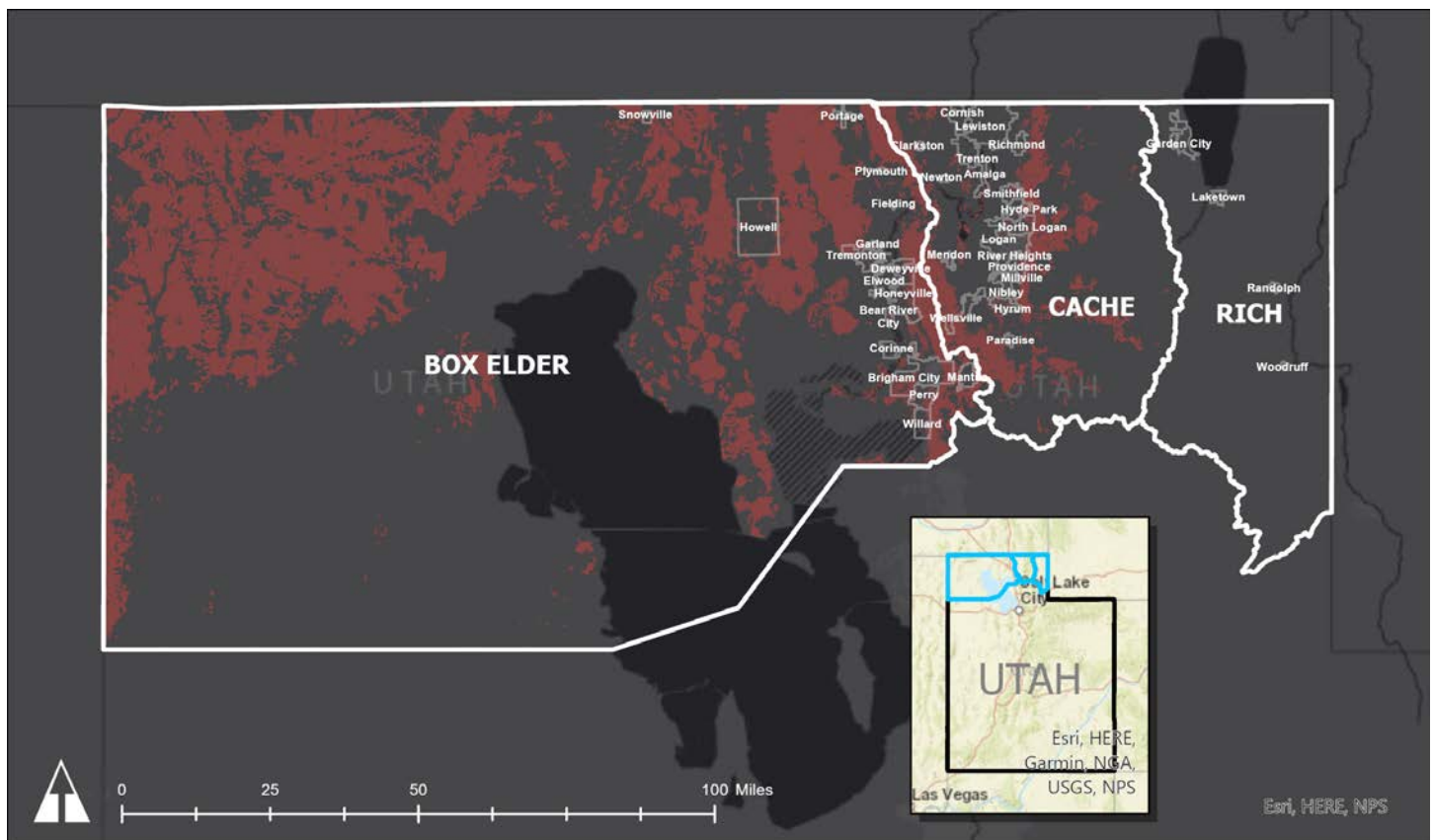


WILDFIRE - UTAH FFSL

Hazard Description: A wildfire is any outdoor fire that is not controlled, supervised, or arranged. Wildfire probability depends on fuel, weather and topography. Wildfires can occur in the wildland or the wildland urban interface. A wildland is an area where development is almost nonexistent, except for roads, railroads, or power lines. Wildland urban interface is an area where structures and other human development meet or intermingle with wildland or vegetation fuels.

Fuels are anything that will burn and include vegetation and structures. The weather, such as high temperatures, low humidity and high winds increase the likelihood that a wildfire will spread. Topography affects speed at which a wildfire will spread. A fire will move more quickly uphill which causes hot gases to rise in front of it. These gases in turn, pre-heat and dry vegetation ahead of the wildfire causing it to catch fire more rapidly.

Hazard Description: This map displays areas of moderate to high wildfire threat developed by the Utah Division of Forestry, Fire and State Lands and historical wildfire occurrences from 1980-2016. For more information visit: <https://wildfirerisk.utah.gov/>

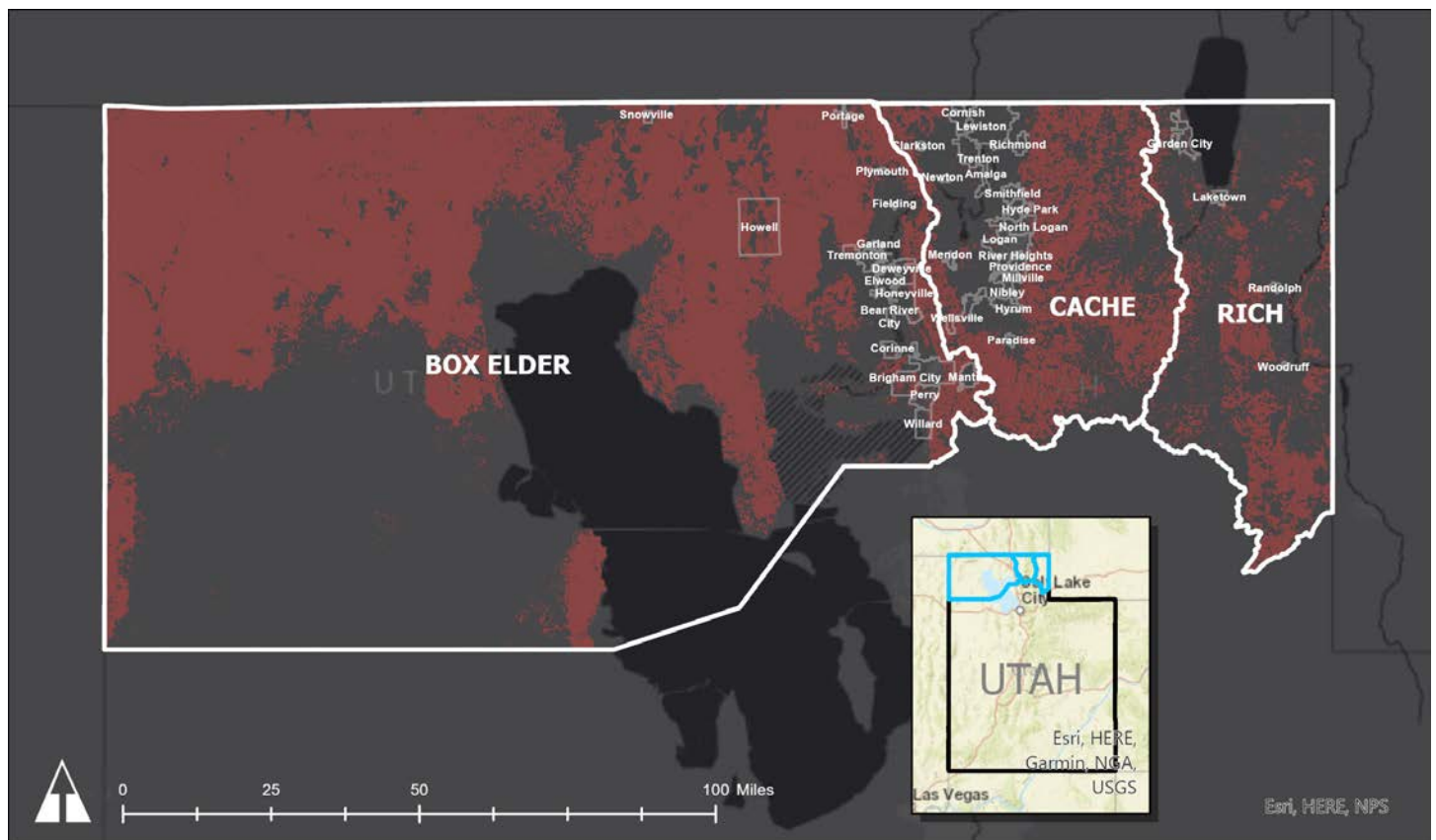


WILDFIRE - U.S. FOREST SERVICE

Hazard Description: A wildfire is any outdoor fire that is not controlled, supervised, or arranged. Wildfire probability depends on fuel, weather and topography. Wildfires can occur in the wildland or the wildland urban interface. A wildland is an area where development is almost nonexistent, except for roads, railroads, or power lines. Wildland urban interface is an area where structures and other human development meet or intermingle with wildland or vegetation fuels.

Fuels are anything that will burn and include vegetation and structures. The weather, such as high temperatures, low humidity and high winds increase the likelihood that a wildfire will spread. Topography affects speed at which a wildfire will spread. A fire will move more quickly uphill which causes hot gases to rise in front of it. These gases in turn, pre-heat and dry vegetation ahead of the wildfire causing it to catch fire more rapidly.

Hazard Description: This map displays areas of moderate to high wildfire hazard potential developed by the U.S. Forest Service and historical wildfire occurrences from 1980-2016. For more information visit: <https://www.firelab.org/project/wildfire-hazard-potential>



AIR QUALITY Exposure: Low Probability: Moderate Severity: Moderate Overall Risk: Moderate	ALUVIAL FANS Exposure: Moderate Probability: Low Severity: Low Overall Risk: Low	AVALANCHE Exposure: Low Probability: High Severity: Moderate Overall Risk: Moderate	CLIMATE CHANGE Exposure: Moderate Probability: High Severity: Moderate Overall Risk: Moderate	DAM FAILURE Exposure: Low Probability: Low Severity: Moderate Overall Risk: Moderate
DROUGHT Exposure: Moderate Probability: Moderate Severity: Moderate Overall Risk: Moderate	FAULTS Exposure: Low Probability: Moderate Severity: Moderate Overall Risk: Moderate	FLOOD Exposure: Moderate Probability: High Severity: Moderate Overall Risk: Moderate	INSECT INFEST. Exposure: Moderate Probability: Moderate Severity: Moderate Overall Risk: Moderate	LANDSLIDE Exposure: Moderate Probability: Moderate Severity: Moderate Overall Risk: Moderate
LIQUEFACTION Exposure: Moderate Probability: Moderate Severity: Moderate Overall Risk: Moderate	PROBLEM SOILS Exposure: High Probability: Low Severity: Low Overall Risk: Moderate	RADON Exposure: Low Probability: High Severity: Low Overall Risk: Moderate	SEASONAL POP. Exposure: Moderate Probability: High Severity: Moderate Overall Risk: Moderate	SEICHE Exposure: Low Probability: Low Severity: Low Overall Risk: Low
SEVERE WEATHER Exposure: High Probability: High Severity: High Overall Risk: High	STEEP SLOPES Exposure: Low Probability: Low Severity: Low Overall Risk: Low	TORNADO Exposure: Low Probability: Low Severity: Moderate Overall Risk: Moderate	VOLCANIC Exposure: Very Low Probability: Very Low Severity: High Overall Risk: Low	WILDFIRE Exposure: Moderate Probability: High Severity: Moderate Overall Risk: High

A comprehensive table showing risk profiles for each natural hazard in the Bear River Region, collectively, identified during the planning process.

Regional natural hazard profiles and risk matrices

The table above shows risk profiles for every natural hazard identified throughout the planning process. Each profile is based on averages from all three counties considering the following three components of risk:

- **EXPOSURE** to the hazard
- **PROBABILITY** of a future hazard event
- **SEVERITY** of a potential of a hazard event

These components were averaged together to create an overall regional risk classification of either low, moderate, or high. While most hazards in the region, collectively, were categorized as a moderate risk, the hazard profiles and risk matrices for each individual county indicate much more diversity when

considering geography, geology and soils, topography, vegetation types, localized climate, population characteristics, housing density, and many other factors.

The next three sections illustrate the diversity of various hazard risks for each respective county for each natural hazard identified in this plan.

For definitions of each natural hazard in the Bear River Region, visit the Utah Hazard Mitigation website at hazards.utah.gov. Scroll down until you see the hazard you would like to learn more about, and click on the photo.

Countywide risk matrices: Exposure, probability, and severity

Risks to each natural hazard for each county in the Bear River Region were analyzed during

the planning process. Risk was determined by considering the three elements of exposure, probability, and severity.

Exposure, or the geographic overlap of natural hazard areas on community assets, was determined for the following 5 categories:

- People, businesses, and property
- Critical facilities and infrastructure
- Working lands
- Natural systems
- Recreation amenities

On the next several pages are tables showing risk matrices for each county, including exposure, probability, severity, and combined matrices. Notice the hazard names at the top of the exposure table in green text - these are

hazards with GIS data available. The figures for those hazards were strictly based on potential loss numbers, and whether or not 30% or more of amenities were potentially impacted by the hazard. The hazards listed in blue text, where GIS data did not exist, were estimated by BRAG staff based on historical exposure and professional opinion, and were vetted through county emergency management staff.

Probability scores were based on qualitative assessments of historical events and the likelihood of more events occurring within

the next 5 years.

Severity scores were based on the scale and level of damage of past events, or the severity of future events according to local natural hazards experts. Severity was also determined for the same 5 categories as they were for exposure.

Combined risk

After averages were determined for each risk factor, scores for exposure, probability, and severity were added together to illustrate combined risk scores. These

combined risk scores provide local governments with a sense of where their highest risks are for each respective natural hazard. Combined risk data is not intended to be all inclusive or perfectly representative, but may help local communities prioritize mitigation projects strategies to protect lives, property, infrastructure, and other amenities as practical, efficient, and cost effective as possible.

The next three pages contain risk matrices and summary tables for each respective county in the Bear River Region:

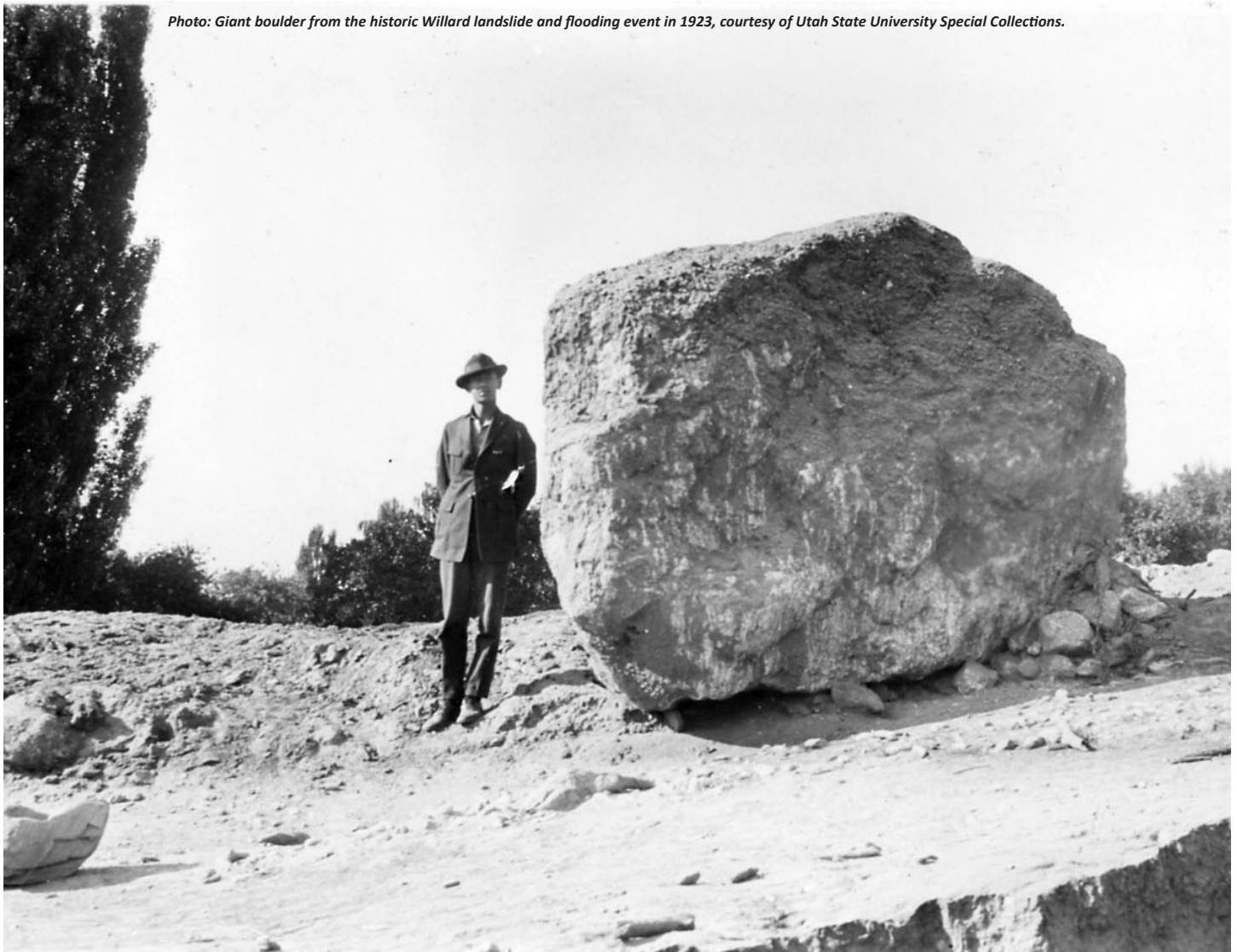


Photo: Giant boulder from the historic Willard landslide and flooding event in 1923, courtesy of Utah State University Special Collections.

BOX ELDER COUNTY EXPOSURE SCORES PER HAZARD

CATEGORY	Wildfire (Combined)	Flood (Combined)	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche Terrain	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
People, Businesses, and Property	1	1	1	1	1	3	0	3	3	0	2	2	2	1	3	3	1	1	0	1	
Critical Facilities and Infrastructure	3	1	0	1	1	1	1	3	3	0	1	2	1	1	0	0	2	1	2	0	2
Working Lands	2	1	1	1	1	3	1	3	3	0	0	1	2	3	3	0	3	1	1	0	0
Natural Systems	2	1	1	2	2	3	1	3	3	0	1	2	2	2	2	0	2	0	2	0	0
Recreation Amenities	3	2	1	1	1	1	1	3	3	0	0	1	1	2	2	0	1	0	2	0	2
TOTAL	11	6	4	6	6	11	4	15	15	0	4	8	8	10	8	3	11	3	8	0	5
AVERAGE	2.2	1.2	0.8	1.2	1.2	2.2	0.8	3.0	3.0	0.0	0.8	1.6	1.6	2.0	1.6	0.6	2.2	0.6	1.6	0.0	1.0
Exposure Scoring Methodology for Hazards with GIS data (green hazard headings): 1) Losses for each community were collectively added together per county for each hazard. 2) Comprehensive county losses per hazard were then calculated by type as a percent of the total. 3) Types of amenities and facilities were grouped into: People, businesses, and property; Critical Facilities and Infrastructure; Working Lands; Natural Systems; and Recreation Amenities. 4) Percent losses for each category were then averaged for each natural hazard. For example, percentages for recreation amenities potentially affected by landslides were all averaged to give one loss value. 5) These averaged percentages were then translated into numerical scores: 0 (Very Low) = less than 1%; 1 (Low) = 1%-15%; 2 (Moderate) = 15%-30%; and 3 (High) = 30%+ Other Notes: Low, Moderate, and High Values were based on other recent hazard mitigation plans and studies, where greater than 30% of losses was generally considered significant. Wildfire and Flood hazards included multiple datasets. As such, percentages were averaged for each dataset, then averaged again for each hazard collectively. Non-GIS hazard (blue hazard headings) exposure scores were estimated based on the potential for 30% or more of the category amenities to be exposed to each hazard at any given time.																					

BOX ELDER COUNTY PROBABILITY SCORES PER HAZARD

CATEGORY	Wildfire	Flood	Dam Failure	Faults (Earthquake)	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmt)	Problem Soils (Bsmt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
Probability Score	3	3	1	3	2	3	1	1	1	2	2	1	3	2	2	3	3	1	1	0	2
*Probability scores based on qualitative assessments of historical events and the likelihood of more events occurring within the next 5 years. Scores range from 0 to 3; 0 = Unlikely, 1 = Somewhat Likely, 2 = Likely, and 3 = Very Likely. Note: For hazard types listed above that do not occur as an event, per se, a probability score of 1 was used to represent a constant, but low, probability of occurrence. For example, problem soils, steep slopes, and aluvial fans are prevalent in the Bear River Region. However, each of these are present as existing conditions only, and do not occur as specific events, while other related hazards, such as landslides, do.																					

BOX ELDER COUNTY SEVERITY SCORES PER HAZARD

CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche	Air Quality	Alluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche**	Volcanic	Seasonal Population Growth
People, Businesses, and Property	2	2	3	2	3	3	1	1	1	2	2	1	1	1	1	3	3	3	2	3	1
Critical Facilities and Infrastructure	2	2	2	3	2	3	2	1	1	1	1	1	1	1	0	0	2	2	2	3	2
Working Lands	3	2	1	0	1	2	0	0	0	1	0	0	2	3	3	0	3	2	1	3	0
Natural Systems	2	1	2	0	2	1	1	0	0	2	1	1	3	3	3	0	2	2	1	3	2
Recreation Amenities	1	1	2	1	1	1	1	0	0	1	1	1	2	2	2	0	1	1	2	3	2
TOTAL	10	8	10	6	9	10	5	2	2	7	5	4	9	10	9	3	11	10	8	15	7
AVERAGE	2.0	1.6	2.0	1.2	1.8	2.0	1.0	0.4	0.4	1.4	1.0	0.8	1.8	2.0	1.8	0.6	2.2	2.0	1.6	3.0	1.4
*Scores were determined based on the severity of past events, or the severity of potential future events. Severity is defined as causing a great amount of damage in relation to each respective category. Scores for each respective category range from 0 to 3; 0 = Not Severe, 1 = Somewhat Severe, 2 = Severe, and 3 = Very Severe. Average scores were calculated for each hazard to determine overall relative severity. **It is very unlikely that a seiche event will occur in Cache County, so a severity rating is irrelevant.																					

BOX ELDER COUNTY COMBINED RISK SCORES PER HAZARD

CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
Exposure (Average)	2.2	1.2	0.8	1.2	1.2	2.2	0.8	3.0	3.0	0.0	0.8	1.6	1.6	2.0	1.6	0.6	2.2	0.6	1.6	0.0	1.0
Probability	3.0	3.0	1.0	3.0	2.0	3.0	1.0	1.0	1.0	2.0	2.0	1.0	3.0	2.0	2.0	3.0	1.0	1.0	0.0	2.0	
Severity (Average)	2.0	1.6	2.0	1.2	1.8	2.0	1.0	0.4	0.4	1.4	1.0	0.8	1.8	2.0	1.8	0.6	2.2	2.0	1.6	3.0	1.4
TOTAL	7.2	5.8	3.8	5.4	5.0	7.2	2.8	4.4	4.4	3.4	3.8	3.4	6.4	6.0	5.4	4.2	7.4	3.6	4.2	3.0	4.4
Scores were based on a scale ranging from 1 to 9; 9 representing the highest risk.																					

CACHE COUNTY EXPOSURE SCORES PER HAZARD																				
CATEGORY	Wildfire (Combined)	Flood (Combined)	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche Terrain	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic
People, Businesses, and Property	1	1	1	1	1	1	0	3	3	0	3	2	2	1	3	3	1	0	0	1
Critical Facilities and Infrastructure	2	1	1	1	3	1	2	3	3	1	1	1	1	0	0	2	1	0	0	1
Working Lands	1	1	1	1	1	1	1	3	3	0	0	1	2	3	0	3	1	0	0	0
Natural Systems	2	2	2	1	2	1	1	2	3	1	1	2	2	2	0	2	0	0	0	2
Recreation Amenities	2	3	1	1	2	2	1	3	3	1	0	1	1	2	2	0	1	0	0	2
TOTAL	8	8	6	5	9	6	5	14	15	3	5	7	8	10	8	3	11	3	0	6
AVERAGE	1.6	1.6	1.2	1.0	1.8	1.2	1.0	2.8	3.0	0.6	1.0	1.4	1.6	2.0	1.6	0.6	2.2	0.6	0.0	1.2

Exposure Scoring Methodology for Hazards with GIS data (green hazard headings): 1) Losses for each community were collectively added together per county for each hazard. 2) Comprehensive county losses per hazard were then calculated by type as a percent of the total. 3) Types of amenities and facilities were grouped into: People, businesses, and property; Critical Facilities and Infrastructure; Working Lands; Natural Systems; and Recreation Amenities. 4) Percent losses for each category were then averaged for each natural hazard. For example, percentages for recreation amenities potentially affected by landslides were all averaged to give one loss value. 5) These averaged percentages were then translated into numerical scores: 0 (Very Low) = less than 1%; 1 (Low) = 1%-15%; 2 (Moderate) = 15%-30%; and 3 (High) = 30%+.

Other Notes: Low, Moderate, and High Values were based on other recent hazard mitigation plans and studies, where greater than 30% of losses was generally considered significant. Wildfire and Flood hazards included multiple datasets. As such, percentages were averaged for each dataset, then averaged again for each hazard collectively.

Non-GIS hazard (blue hazard headings) exposure scores were estimated based on the potential for 30% or more of the category amenities to be exposed to each hazard at any given time.

CACHE COUNTY PROBABILITY SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults (Earthquake)	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic
Probability Score	3	3	1	2	2	1	1	1	3	3	1	3	2	2	3	3	1	0	0	2

*Probability scores based on qualitative assessments of historical events and the likelihood of more events occurring within the next 5 years. Scores range from 0 to 3; 0 = Unlikely, 1 = Somewhat Likely, 2 = Likely, and 3 = Very Likely. Note: For hazard types listed above that do not occur as an event, per se, a probability score of 1 was used to represent a constant, but low, probability of occurrence. For example, problem soils, steep slopes, and aluvial fans are prevalent in the Bear River Region. However, each of these are present as existing conditions only, and do not occur as specific events, while other related hazards, such as landslides, do.

CACHE COUNTY SEVERITY SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche**	Volcanic
People, Businesses, and Property	2	2	3	2	3	3	1	1	1	2	3	1	1	1	3	3	3	0	3	1
Critical Facilities and Infrastructure	2	2	2	3	2	3	2	1	1	2	2	1	1	1	0	0	2	2	0	2
Working Lands	2	1	1	0	1	2	0	0	0	1	0	0	2	3	3	0	3	2	0	0
Natural Systems	2	1	2	0	2	1	1	0	0	2	1	1	3	3	3	0	2	2	0	2
Recreation Amenities	2	1	2	1	1	2	1	0	0	1	1	1	2	2	2	0	1	1	0	2
TOTAL	10	7	10	6	9	11	5	2	2	8	7	4	9	10	9	3	11	10	0	7
AVERAGE	2.0	1.4	2.0	1.2	1.8	2.2	1.0	0.4	0.4	1.6	1.4	0.8	1.8	2.0	1.8	0.6	2.2	2.0	0.0	1.4

*Scores were determined based on the severity of past events, or the severity of potential future events. Severity is defined as causing a great amount of damage in relation to each respective category. Scores for each respective category range from 0 to 3; 0 = Not Severe, 1 = Somewhat Severe, 2 = Severe, and 3 = Very Severe. Average scores were calculated for each hazard to determine overall relative severity. **It is very unlikely that a seiche event will occur in Cache County, so a severity rating is irrelevant.

CACHE COUNTY COMBINED RISK SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Liquefaction	Steep Slopes	Problem Soils (No Bsmnt)	Problem Soils (Bsmnt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic
Exposure (Average)	1.6	1.6	1.2	1.0	1.8	1.2	1.0	2.8	3.0	0.6	1.0	1.4	1.6	2.0	1.6	0.6	2.2	0.6	0.0	1.2
Probability	3.0	3.0	1.0	2.0	2.0	2.0	1.0	1.0	1.0	3.0	3.0	1.0	3.0	2.0	2.0	3.0	3.0	1.0	0.0	2.0
Severity (Average)	2.0	1.4	2.0	1.2	1.8	2.2	1.0	0.4	0.4	1.6	1.4	0.8	1.8	2.0	1.8	0.6	2.2	2.0	0.0	1.4
TOTAL	6.6	6.0	4.2	4.2	5.6	5.4	3.0	4.2	4.4	5.2	5.4	3.2	6.4	6.0	5.4	4.2	7.4	3.6	0.0	4.6

Scores were based on a scale ranging from 1 to 9, 9 representing the highest risk.

RICH COUNTY EXPOSURE SCORES PER HAZARD																				
CATEGORY	Wildfire (Combined)	Flood (Combined)	Dam Failure	Faults	Landslide	Steep Slopes	Problem Soils (No Bsmt)	Problem Soils (Bsmt)	Avalanche Terrain	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
People, Businesses, and Property	1	2	1	1	1	0	3	3	0	1	1	1	2	1	3	3	1	1	0	3
Critical Facilities and Infrastructure	2	3	1	1	1	1	3	3	0	0	1	0	0	0	2	1	1	0	3	
Working Lands	2	2	1	1	2	1	3	3	0	0	0	2	3	3	0	3	1	0	0	0
Natural Systems	2	3	1	1	1	1	3	3	0	0	1	2	2	2	0	2	0	0	0	2
Recreation Amenities	2	2	1	1	2	1	3	3	0	0	1	1	2	2	0	1	0	2	0	2
TOTAL	9	12	5	5	7	4	15	15	0	1	4	6	9	8	3	11	3	4	0	10
AVERAGE	1.8	2.4	1.0	1.0	1.4	0.8	3.0	3.0	0.0	0.2	0.8	1.2	1.8	1.6	0.6	2.2	0.6	0.8	0.0	2.0
Exposure Scoring Methodology for Hazards with GIS data (green hazard headings): 1) Losses for each community were collectively added together per county for each hazard. 2) Comprehensive county losses per hazard were then calculated by type as a percent of the total. 3) Types of amenities and facilities were grouped into: People, businesses, and property; Critical Facilities and Infrastructure; Working Lands; Natural Systems; and Recreation Amenities. 4) Percent losses for each category were then averaged for each natural hazard. For example, percentages for recreation amenities potentially affected by landslides were all averaged to give one loss value. 5) These averaged percentages were then translated into numerical scores: 0 (Very Low) = less than 1%; 1 (Low) = 1%-15%; 2 (Moderate) = 15%-30%; and 3 (High) = 30%+																				
Other Notes: Low, Moderate, and High Values were based on other recent hazard mitigation plans and studies, where greater than 30% of losses was generally considered significant. Wildfire and Flood hazards included multiple datasets. As such, percentages were averaged for each dataset, then averaged again for each hazard collectively.																				
Non-GIS hazard (blue hazard headings) exposure scores were estimated based on the potential for 30% or more of the category amenities to be exposed to each hazard at any given time.																				

RICH COUNTY PROBABILITY SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults (Earthquake)	Landslide	Steep Slopes	Problem Soils (No Bsmt)	Problem Soils (Bsmt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
Probability Score	3	3	1	1	2	1	1	1	2	1	1	3	2	3	3	1	1	0	3	3
*Probability scores based on qualitative assessments of historical events and the likelihood of more events occurring within the next 5 years. Scores range from 0 to 3; 0 = Unlikely, 1 = Somewhat Likely, 2 = Likely, and 3 = Very Likely. Note: For hazard types listed above that do not occur as an event, per se, a probability score of 1 was used to represent a constant, but low, probability of occurrence. For example, problem soils, steep slopes, and aluvial fans are prevalent in the Bear River Region. However, each of these are present as existing conditions only, and do not occur as specific events, while other related hazards, such as landslides, do.																				

RICH COUNTY SEVERITY SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Steep Slopes	Problem Soils (No Bsmt)	Problem Soils (Bsmt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
People, Businesses, and Property	2	2	3	2	2	1	1	1	2	2	1	1	1	3	3	3	2	3	1	1
Critical Facilities and Infrastructure	2	2	2	3	3	2	1	1	2	1	1	1	0	0	2	2	1	3	3	3
Working Lands	3	1	1	0	1	0	0	0	1	0	0	2	3	3	0	3	2	0	3	0
Natural Systems	2	1	2	0	1	1	0	0	2	1	1	2	3	3	0	2	2	1	3	2
Recreation Amenities	2	1	1	0	1	1	0	0	1	1	1	2	2	0	1	1	2	3	3	2
TOTAL	11	7	9	5	8	5	2	2	8	5	4	8	10	9	3	11	10	6	15	8
AVERAGE	2.2	1.4	1.8	1.0	1.6	1.0	0.4	0.4	1.6	1.0	0.8	1.6	2.0	1.8	0.6	2.2	2.0	1.2	3.0	1.6
*Scores were determined based on the severity of past events, or the severity of potential future events. Severity is defined as causing a great amount of damage in relation to each respective category. Scores for each respective category range from 0 to 3; 0 = Not Severe, 1 = Somewhat Severe, 2 = Severe, and 3 = Very Severe. Average scores were calculated for each hazard to determine overall relative severity.																				

RICH COUNTY COMBINED RISK SCORES PER HAZARD																				
CATEGORY	Wildfire	Flood	Dam Failure	Faults	Landslide	Steep Slopes	Problem Soils (No Bsmt)	Problem Soils (Bsmt)	Avalanche	Air Quality	Aluvial Fans	Climate Change	Drought	Insect Infestation/ Plant Disease	Radon	Severe Weather	Tornado	Seiche	Volcanic	Seasonal Population Growth
Exposure (Average)	1.8	2.4	1.0	1.0	1.4	0.8	3.0	3.0	0.0	0.2	0.8	1.2	1.8	1.6	0.6	2.2	0.6	0.8	0.0	2.0
Probability	3.0	3.0	1.0	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0	3.0	2.0	3.0	3.0	1.0	1.0	0.0	3.0	3.0
Severity (Average)	2.2	1.4	1.8	1.0	1.6	1.0	0.4	0.4	1.6	1.0	0.8	1.6	2.0	1.8	0.6	2.0	2.0	1.2	2.8	1.6
TOTAL	7.0	6.8	3.8	3.0	5.0	2.8	4.4	4.4	3.6	2.2	2.6	5.8	5.8	5.4	4.2	7.2	3.6	3.0	2.8	6.6
Scores were based on a scale ranging from 1 to 9; 9 representing the highest risk.																				



Photo: New development on the benches of Cache Valley.

Implications for future growth

While the type and location of future development in the county and within each jurisdiction can be difficult to accurately project, both temporally and spatially, it is important to consider implications various natural hazards may have on future populations and community assets.

Most of the time, developers prefer to build on land that provides the best return on investment. Land that is already near existing infrastructure, is inexpensive to purchase, and requires minimal improvements for construction is the most likely to be developed first. However, when these less expensive properties are built out, development patterns often shift to those that provide better views, larger lots, more amenities, and better access to the outdoors. Often, these lots are located on steeper hillsides and benches, canyons and drainage areas, or other places that were not developed early on for a

variety of other reasons.

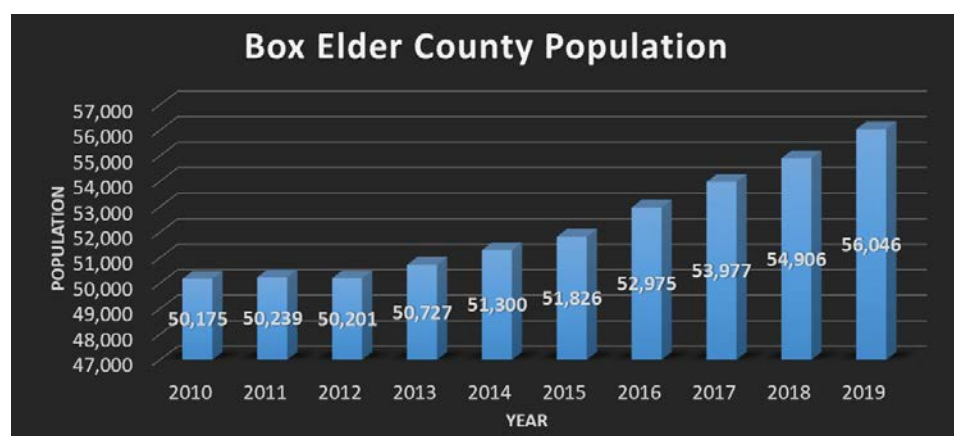
Consequently, some communities in the Bear River Region do not currently have significant risks to residential areas from natural hazards, especially the smaller more rural cities and towns. However, as those cities and towns eventually expand, especially those that are already located close to larger cities, some of these communities could see risks to residential areas and other community assets increase dramatically in the next 10 or 20 years.

Below are summaries for each county regarding potential future development patterns, and potential risks to those areas from various natural hazards.

Box Elder County

Between 2010 and 2019, Box Elder County's population increased from 50,175 residents to 56,046. This equates to between roughly 1% and 2% growth per year.

Overall, most of the recent growth in Box Elder County has occurred in Perry, Willard, Brigham City, and Tremonton.



Population data citation: Annual Estimates of the Resident Population for Counties in Utah: April 1, 2010 to July 1, 2019 (CO-EST2019-ANNRES-49)

In Perry and Willard, most of the new growth is expected to occur along eastern benches and open areas on the periphery of existing developments. Much of this growth could be located along the Brigham City segment of the Wasatch Fault, as well as wildland-urban interface areas near the base of the mountains. Likewise, canyon drainages exist in similar areas in higher elevations above the towns. If development is allowed in these drainages, or in alluvial fans downhill from these areas, there is also a potential risk for debris flows following a heavy rain event. Wildfires in the summer, followed by significant rain or snowmelt events in the fall or following spring could exacerbate these impacts. Low elevation properties west of town could also be impacted as development occurs, via high water table and potential liquefaction risk areas.

Brigham City is seeing steady growth north and west of town. Some of these areas are in lower elevations where potential flood risk, high water table, and potential liquefaction risk exists. Risks in Willard and Perry also exists on steeper hillsides east of town, where wildfires could occur, or drainage areas could flood and cause severe damage if structures are located in those areas.

Tremonton has experienced steady and significant growth in the past few years. Most of the new development has occurred on the fringes of town, near existing residential areas. Some homes have been constructed east of the Malad River drainage. The greatest risks to future development in Tremonton collectively is likely in

flood and landslide hazard areas near the Malad and Bear River drainages, so those areas should be avoided in order to reduce potential losses.

Development for the remainder of Box Elder County communities will likely occur in safe, lower elevation areas first. However, as communities grow, that development will likely move to areas with a high water table that are prone to flooding; steeper benches and hillsides, canyon drainages, and along river corridors. Recent development has occurred along the Bear River, specifically, where, although the FEMA 100-year floodplain was legally modified, significant risk still exists for flooding and landslides along steep river banks. Again, development along these large river drainages and corridors will pose significant risks to residents and community assets.

Cache County

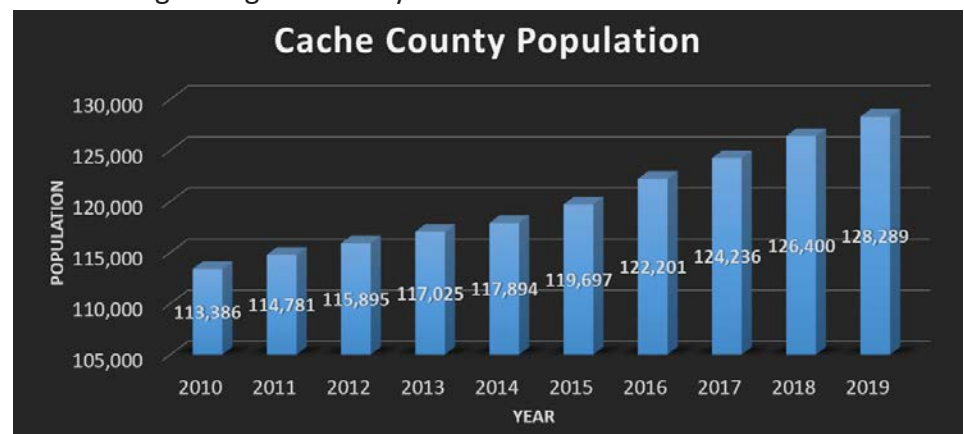
Between 2010 and 2019, Cache County's population increased from 113,386 residents to 128,289. This equates to between roughly 1% and 2.5% growth per year.

Most of the southern and eastern sides of Cache Valley have been growing at a steady

rate. The communities on the south end of the valley, namely Wellsville, Mendon, Hyrum, and Paradise, are all experiencing growth in what used to be lower-elevation agricultural fields. The most significant risk for these developments are drainage areas from nearby canyons, geologic faults on the benches, and high water table and liquefaction areas in lower elevations. Steep slopes along rivers (Bear, Little Bear, Blacksmith Fork) and reservoir edges (Hyrum Reservoir in particular), are also places where development pressures may increase over time, and should be planned carefully to avoid potential losses.

Development is also occurring in Logan, Nibley, Millville, and Providence in low-elevation areas with potential high water tables and flood risk. In most cases, this is not an issue unless homes and other structures have basements, in which cases substantial damage could occur, especially during high rain or snow melt events.

In general, all of the east bench communities in Cache Valley are experiencing increasing development pressures along the benches and higher-elevation slopes. This, of course, is where



Population data citation: Annual Estimates of the Resident Population for Counties in Utah: April 1, 2010 to July 1, 2019 (CO-EST2019-ANNRES-49)

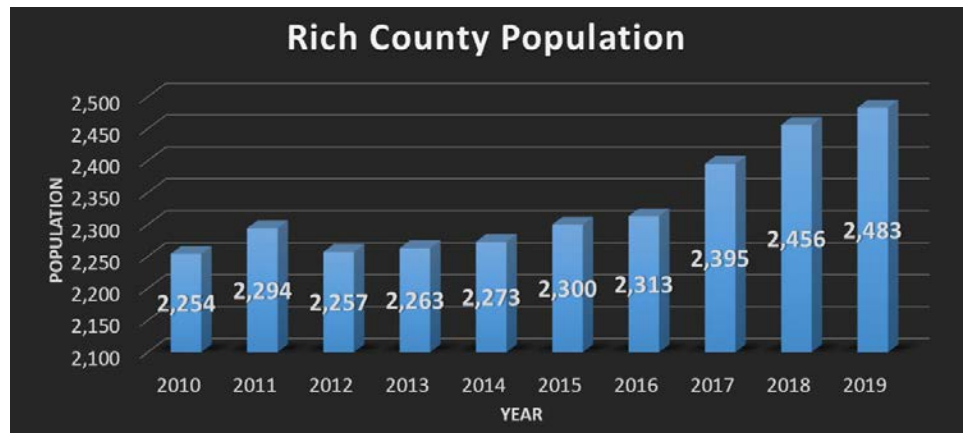
high risk exists from landslides, geologic faults, and wildfire. Likewise, if development occurs in drainage areas near the canyons, there is an increased risk for flooding and debris flows, the latter being triggered by high rain events after a wildfire has occurred, stripping the landscape of structural vegetation.

As these, and other, communities build out, there will also likely be pressure build along river corridors, including the Logan, Blacksmith, Little Bear, Bear, and Cub Rivers. Steep banks along the river banks and in the greater river basin areas can be hot spots for landslides, which have occurred on a fairly regular basis in Cache Valley.

Small communities in particular should be very careful with how they build out in the future. Historic grid pattern developments as they were laid out by pioneers in the late 19th Century, largely avoided some of the more severe hazard areas. As communities grow, it is essential that they use the best data available to inform local land use ordinances, in order to avoid potential losses to their community.

Rich County

Between 2010 and 2019, Rich County's population increased from 2,254 residents to roughly 2,483. This equates to between roughly 1% and 2.5% growth per year. However, Rich County population figures are sometimes misleading. During the summer months, populations swell from 2,400 year-round residents, to between 30,000 to 60,000 on any given weekend, due to high visitation at Bear Lake (includes



Population data citation: Annual Estimates of the Resident Population for Counties in Utah: April 1, 2010 to July 1, 2019 (CO-EST2019-ANNRES-49)

both Idaho and Utah visitation numbers).

Probably the greatest challenge in Rich County related to development in natural hazard areas, are the homes being constructed both on the beach front, and on steeper hillsides near U.S. Forest Service boundaries. Flooding is an obvious issue along the lake shore, especially during extreme weather events and in years with higher rainfall or extraordinary snow melt events in general. Likewise, if an earthquake occurs along either the west or east faults, especially the east fault located under the lake bed, a seiche (a small tsunami) is a likely risk.

Garden City, Laketown, and the unincorporated county near the lake have the highest development pressures in the county. Any properties with either access to, or views of, the lake are, generally, considered highly desirable. West of Garden City, along most of the hillsides parallel to the lake shore, homes are being constructed at an alarming rate. Many of these homes are at risk from either wildfires or landslides. North of Laketown and on the east side of Garden City near the lake shore, properties are selling quickly and

for disproportionately higher values than other local nearby properties. These homes may also be at risk from flooding, liquefaction during an earthquake, or a seiche.

While Randolph and Woodruff are not growing at the same rate as the lakeside communities, there is some growth occurring. Both communities have higher than normal risks for flooding. Much of this is likely due to their proximity to the Bear River drainage, where high water tables or certain soils may be conducive to wet conditions.



Photo of Woodruff, Utah courtesy of Google Maps

Community Sections

Specific community risk assessments are available to view and download via the interactive online plan located at: <https://brag.maps.arcgis.com/apps/MapSeries/index.html?appid=fc507e02862e42cbbf627437c1658549>.

These individual community risk assessments provide a much more detailed assessment of current risks from each natural hazard

in the region (at least those with GIS data). Technical analyses were conducted to provide comprehensive lists of potential losses for each city, town, and county, and potential loss tables were created. Likewise, mitigation strategies were vetted through local working groups and local elected and appointed officials and staff, and are also available for viewing online or for download.

This plan can be combined with these community-specific documents to create a complete plan for cities, towns, and counties which they can then adopt in local public meetings, or reference as a printed hard-copy of the plan. Communities can also adopt the online plan in its entirety.

***FOR DETAILED RISK ASSESSMENTS, POTENTIAL LOSS TABLES, AND MITIGATION STRATEGY LISTS, VIEW OR DOWNLOAD COMMUNITY-SPECIFIC SECTIONS ON THE PLAN WEBSITE AT: <https://brag.maps.arcgis.com/apps/MapSeries/index.html?appid=fc507e02862e42cbbf627437c1658549> -**



Photo: Waterford, NY landslide in May of 2020 (<https://www.timesunion.com/news/article/Waterford-landslide-still-moving-15254487.php>).

Implementation Resources

While learning about natural hazards and potential risks to local communities is the first step to reducing losses from natural hazard events, implementing mitigation strategies is the key to actually saving lives, property, critical facilities, and other community assets. Below are several key resources to help you get started with implementing mitigation strategies in your community.

Local land use ordinances

According to the *2019 Mitigation Saves Report* by the National Institute of Building Sciences, adopting hazard mitigation-specific model ordinances can give a 11:1 return on investment to local governments! For little or no cost, local governments can customize and adopt a fairly simple geologic or flood hazard land use ordinance. These ordinances may prevent development in extreme hazard areas like active landslides or steep slopes, or, in most cases, they may only require slight changes in design and engineering following a

special hazard-specific study.

These local ordinances can reduce liability for local governments dramatically, and can help protect the health, welfare, and safety of local residents.

See the graphic on the next page for a list of Benefit/Cost Ratios (BCRs) for various types of mitigation strategies.

The State of Utah has several effective model ordinances that can serve as great starting points for local governments:

- **UGS GEOLOGIC HAZARDS MODEL ORDINANCE (UGS)**
- **UTAH DEM CASE D FLOOD MODEL ORDINANCE (Utah DEM)**
- **UTAH DEM HIGHER STANDARD FLOOD MODEL ORDINANCE (Utah DEM)**

**The Utah Geological Survey (UGS) and the Utah Division of Emergency Management (Utah DEM) staff can provide assistance with customizing model ordinances for your city, town, or county.*

Contact Steve Bowman with UGS at 801-537-3304 or stevebowman@utah.gov. Contact Kathy Holder with Utah DEM at 801-538-3332 or kcholder@utah.gov.

Grants/loans

- FEMA BRIC Grants (Formerly “Pre-Disaster Mitigation”) 75% funded (25% local match). Apply through the State Division of Emergency Management. All projects must be included in this pre-disaster mitigation plan in order to apply. Visit the BRIC website for more information.
- Community Development Block Grants (CDBG) 100% funded (but 10% or more local match will make application more competitive). Can fund infrastructure projects (sewer/water), community buildings, emergency response vehicles/facilities, etc. For lower income communities or areas (80% AMI or less for 50%+ of residents)
- Permanent Community Impact Fund Board (CIB)

BCRs for Mitigation Strategies Studied

(from Highest to Lowest)

- Adopting Model Codes Saves \$11 per \$1 Spent
- Federal Mitigation Grants Save \$6 per \$1 Spent
- Private-Sector Building Retrofit Saves \$4 per \$1 Spent
- Exceeding Codes Saves \$4 per \$1 Spent
- Mitigating Infrastructure Saves \$4 per \$1 Spent

Source: National Institute of Building Sciences, 2019 Mitigation Saves Report

Planning grants: 50% funded (50% cash match). Infrastructure or large capital project grants (match varies for non-planning grants). Eligible entities include local governments, districts, or post-secondary education institutions. Low-interest loans also available for total or as part of grant/loan combination. Other mitigation and planning resources

- Site specific geologic hazards data, assessments and studies from the Utah Geological Survey
- Flood hazard data and mapping from the Utah DEM and/or FEMA
- Wildfire mitigation planning and projects from Utah FFSL (Visit <https://ffsl.utah.gov/wp-content/>)

In addition to all of these great resources, FEMA has a comprehensive webpage devoted to implementation, integration, and maintenance of mitigation planning activities. It

includes resources, guides, best practices, case studies, and other helpful information. To access these resources, visit: <https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/implementing>

Likewise, FEMA has also provided a list of mitigation ideas in a 2013 document titled, "Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards," available here: https://www.fema.gov/sites/default/files/2020-06/fema-mitigation-ideas_02-13-2013.pdf



Photo (right): Goats reducing fuel loads along the Wasatch Front courtesy of Utah Forestry, Fire, and State Lands.

Appendices

APPENDIX A – References and Works Cited

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APPENDIX B - Meeting Agendas and Attendance Lists

AGENDA

Pre-Disaster Mitigation Plan Update REGIONAL KICK-OFF MEETING

Tuesday, December 4th, 2018 - 11:00 A.M. to 1:30 P.M.

Cache County Sheriff's Office
1225 West 200 North Valley View
Logan, Utah 84321
(3rd Floor Training Rooms)

11:00 A.M.	Welcome, Introductions, and Benefits of Hazard Mitigation Planning	WILL LUSK - Cache County Emergency Manager
11:20 A.M.	Pre-Disaster Mitigation Planning in the State of Utah	ERIC MARTINEAU - Utah Division of Emergency Management
12:00 Noon	Lunch (Provided)	
12:20 P.M.	The Plan Update Process for the Bear River Region	ZAC COVINGTON and SCOTT MCCOMB - BRAG Staff
1:00 P.M.	Input on Working Groups and the Planning Process	Facilitated by BRAG Staff
1:30 P.M.	Adjourn	

12/4/18 Kick-off Meeting Attendance List

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
<u>Zac Covington</u>	<u>BRAG</u>	<u>zac@brag.utah.gov</u>
<u>Emily Thomas</u>	<u>Brighton City Engineers Office</u>	<u>emily@jonescivil.com</u>
<u>Eric Marten</u>	<u>DEM</u>	<u>emart@cache.utah.gov</u>
<u>Math Paise</u>	<u>BURE</u>	<u>mpaise@cut.net</u>
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<u>Scott McComb</u>	<u>BRAG</u>	<u>scott@brag.utah.gov</u>
<u>Scott Lyons</u>	<u>BEC</u>	<u>slions@boxeldercounty.org</u>
<u>Marcus Wagner</u>	<u>BEC</u>	<u>MWagner@boxeldercounty.org</u>
<u>MATT BILODGAN</u>	<u>CACHE CO SHERIFFS OFFICE</u>	<u>M31LODGAN@CACHESHERIFF.ORG</u>
<u>Kimberly Gyles</u>	<u>Utah Div. of Emergency Mgmt.</u>	<u>Kgyles@utah.gov</u>
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<u>Craig Butters</u>	<u>Cache County</u>	<u>craig.butters@cachecounty.org</u>
<u>Ember Herrick</u>	<u>DEM</u>	<u>esherrick@utah.gov</u>



2019 PRE-DISASTER MITIGATION PLAN UPDATE - BEAR RIVER REGION, UTAH

AGENDA

BOX ELDER COUNTY - RISK ASSESSMENT MEETING

Thursday, March 21st - 12:00 P.M to 2:30 P.M.

Box Elder County Courthouse
1 S. Main St
Brigham City, Utah 84321
Commission Chambers Room 23

12:00 P.M.	Welcome and Introductions	MARK MILLET - <i>Box County Emergency Manager</i>
12:05 P.M.	<i>Breakfast (Provided)</i>	
12:20 P.M.	Review of Community Critical Facilities and Infrastructure	ZAC COVINGTON - <i>BRAG Regional Planner</i>
12:40 P.M.	Presentation on Wildfire Hazard	KEN THEIS - <i>WUI Coordinator, Utah FFSL</i>
1:00 P.M.	<i>10-Minute Break</i>	
1:10 P.M.	Presentation on Geologic Hazards	STEVE BOWMAN & RICHARD GIRAUD <i>Utah Geological Survey</i>
1:50 P.M.	Online Natural Hazard Maps and Layers	<i>BRAG Staff</i>
2:20 P.M.	Next Steps	MARK MILLET
2:30 P.M.	Adjourn	

3/21/19 BEC RA Meeting Attendance List

3/21/19 - BRAG PDMP Mtg. (BEC)
 Organization

Name

E-mail Address

James Turner	USFS Uinta-Wasatch-Cache	STURNER@USFS.FED.US
Jennifer Parker	USFS - Logan RD	jenniferparker@usfs.fed.us
Mike Dunphy	USFS Bear River	michael_dunphy@usfs.us
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Mike Weeber	Bear River Health Dept	mweeber@brhd.org
Kimberly Guber	State DEM	Kguber@utah.gov
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Janette Sorensen	Garland City	janette@garlandutah.org
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Ember Herrick	Utah DEM	esherrick@utah.gov



2019 PRE-DISASTER MITIGATION PLAN UPDATE - BEAR RIVER REGION, UTAH

AGENDA

CACHE COUNTY - RISK ASSESSMENT MEETING

Wednesday, April 10th - 8:30 A.M to 11 A.M.

Cache County Sheriff's Office
1225 West 200 North Valley View
Logan, Utah 84321
(3rd Floor Training Rooms)

8:30 A.M.	Welcome and Introductions	WILL LUSK - <i>Cache County Emergency Manager</i>
8:35 A.M.	<i>Breakfast (Provided)</i>	
8:50 A.M.	Review of Community Critical Facilities and Infrastructure	ZAC COVINGTON - <i>BRAG Regional Planner</i>
9:10 A.M.	Presentation on Wildfire Hazard	KEN THEIS - <i>WUI Coordinator, Utah FFSL</i>
9:30 A.M.	<i>10-Minute Break</i>	
9:40 A.M.	Presentation on Geologic Hazards	STEVE BOWMAN & RICHARD GIRAUD <i>Utah Geological Survey</i>
10:20 A.M.	Online Natural Hazard Maps and Layers	<i>BRAG Staff</i>
10:50 A.M.	Next Steps	WILL LUSK
11:00 A.M.	Adjourn	

4/10/19 CC RA Meeting Attendance List (Page 1)

CACHE CNTY POMP RA MTA 4/10

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
Staci Benkhead	Providence City	StaciBenkhead@providence-utah.gov
Rob Stapley	Providence City	RStapley@providence-utah.gov
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David Zook	Nibley City	david@nibleycity.com
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Elaine Moody	Charleston City	trgmoody@gmail.com

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4/10/19 CC RA Meeting Attendance List (Page 2)

CACHE COUNTY POMP RA MTG 4/10

Name	Organization	E-mail Address
Stephen Nelson	Nibley City	stephen@nibleycity.com
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Alan Luce	North Logan	alan@northlogansurvey.org
Spencer But	North Logan	spencer@northlogansurvey.org
Gordon Anderson	Newton	gordon@andertein.org
Shardean Flint	Hyde Park	mayor@hideparkcity.org
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Steve Bourman	Utah Geological Survey	stevbourn@utah.gov
Mark Brunson	Great Basin Fire Science Exchange	mark.brunson@usu.edu
Jesse Walker	American Red Cross of Northern Utah	jessewalkerphoto@gmail.com
Ember Herrick	DEM	esherrick@utah.gov
Eric Martineau	DEM	emartineau@utah.gov
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Ear Conington	BRAG	

[PAGE 2 OF 2]



2019 PRE-DISASTER MITIGATION PLAN UPDATE - BEAR RIVER REGION, UTAH

AGENDA

RICH COUNTY - RISK ASSESSMENT MEETING

Wednesday, April 10th - 12:30 P.M. to 3:00 P.M.

Garden City Town Center
(North Conference Room)
69 N. Paradise Parkway
Garden City, UT 84028

12:30 P.M.	Welcome and Introductions	BRYCE NIELSON - <i>Rich County Emergency Manager</i>
12:35 P.M.	<i>Lunch (Provided)</i>	
12:50 P.M.	Review of Community Critical Facilities and Infrastructure	ZAC COVINGTON - <i>BRAG Regional Planner</i>
1:10 P.M.	Presentation on Wildfire Hazard	KEN THEIS - <i>WUI Coordinator, Utah FFSL</i>
1:30 P.M.	<i>10-Minute Break</i>	
1:40 P.M.	Presentation on Geologic Hazards	STEVE BOWMAN & RICHARD GIRAUD <i>Utah Geological Survey</i>
2:20 P.M.	Online Natural Hazard Maps and Layers	<i>BRAG Staff</i>
2:50 P.M.	Next Steps	BRYCE NIELSON
3:00 P.M.	Adjourn	

4/10/19 RC RA Meeting Attendance List

Rich County PDMP RA Mtg. 4/10/19

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
Ember Herrick	DEM	esherrick@utah.gov
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Steve Bowman	Utah Geological Survey	stevebowman@utah.gov
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Mitch Parker		
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Blair Atap	FFSL	BlairAtap@utah.gov
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JAMES TURNER	USFS LOGAN RD	STURNER@FS.FED.US
Zoe Covington	BRAG	

AGENDA

BOX ELDER COUNTY MITIGATION STRATEGIES MEETING

2020 Pre-Disaster Mitigation Plan Update

Thursday, January 30, 2020 – from 5:00 to 7:00 PM

Box Elder County Commission Chambers
Historic Box Elder County Courthouse
1 S. Main Street
Brigham City, UT 84032

5:00 P.M.	Welcome and Introductions	MARK MILLETT - <i>Box Elder County Emergency Manager</i>
5:10 P.M.	FEMA-Approved Mitigation Strategies and Flood Ordinances	ERIC MARTINEAU - <i>Utah Department of Public Safety</i>
5:35 P.M.	Geologic Hazards Model Ordinance	RICH GIRAUD - <i>Utah Geological Survey</i>
6:00 P.M.	<i>DINNER (Provided)</i>	
6:20 P.M.	Community Potential Loss Analysis	ZAC COVINGTON <i>Bear River Association of Governments</i>
6:40 P.M.	Mitigation Strategies Exercise	ZAC COVINGTON
6:55 P.M.	Next Steps	MARK MILLETT
7:00 P.M.	Adjourn	

1/30/20 BEC MS Meeting Attendance List (Page 1)

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
Paul Fulgham	Tremonton City	pfulgham@tremontonscity.com
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MARK BRADLEY	BRIGHTON CITY	mbradley@bcutah.org

1/30/20 BEC MS Meeting Attendance List (Page 2)

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
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Mark Mucitt	Box Elder County	mmucitt@boxeldercounty.org
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JAMES MORGAN	UTAH STATE PARKS	JAMES.MORGAN@UTAH.GOV
Sharon Normoyle	Bear River City	Shardan97@gmail.com

AGENDA

CACHE COUNTY MITIGATION STRATEGIES MEETING

2020 Pre-Disaster Mitigation Plan Update

Monday, February 10th, 2020 – from 5:00 to 7:00 PM

Cache County Sheriff's Office
1225 West 200 North Valley View
Logan, Utah 84321
(3rd Floor Training Rooms)

5:00 P.M.	Welcome and Introductions	WILL LUSK - <i>Cache County Emergency Manager</i>
5:10 P.M.	FEMA-Approved Mitigation Strategies and Floodplain Model Ordinances	BRANDON WEBB - <i>FEMA - SLC Office</i>
5:35 P.M.	Geologic Hazards Model Ordinance	STEVE BOWMAN - <i>Utah Geological Survey</i>
6:00 P.M.	<i>DINNER (Provided)</i>	
6:20 P.M.	Community Potential Loss Analysis	ZAC COVINGTON <i>Bear River Association of Governments</i>
6:40 P.M.	Mitigation Strategies Exercise	ZAC COVINGTON
6:55 P.M.	Next Steps	WILL LUSK
7:00 P.M.	Adjourn	

2/10/20 CC MS Meeting Attendance List (Page 1)

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
Ashley McGraw	McClure City	Ashley@McClureCity.org
Jakey Kimball	CVTD	jkimball@cvtdbus.org
Angie White	BRTHD	angie@brthd.org
Kyle Lindsey	Logan Fire Dept	Kyle.Lindsey@logan.utah.gov
Sandy Spindle	North Logan EM	sandy.spindle@northlogan.com
Kimberly Giles	State DM	kgiles@utah.gov
Vic Little	Paradise Town	VLITTLE@PARADISE.UTAH.GOV
Kevin Barjenbruch	NWS	Kevin.Barjenbruch@nws.gov
Brent Speth	Providence	b.speth@providence.utah.gov
Shardean Flint	Hyde Park	mayor@hydeparkcity.org
Ryan Snow	Providence	RyanSnow2@providence.utah.gov
Rob Stapley	providence City	R.Stapley@providence.utah.gov
Jesse Walker	Red Cross	jesse.walker@redcross.org
Terrie Wierenga	Richmond	twierenga@richmond.utah.gov
Jennifer Parker	Forest Service - Logan RD	jennifer.parker@usda.gov
Kelly Field	Lewiston City	mayorfield@gmail.com

2/10/20 CC MS Meeting Attendance List (Page 2)

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
<u>Stephen Nelson</u>	<u>Nibley City</u>	<u>stephen@nibleycity.com</u>
<u>Gordon Anderson</u>	<u>Newton City</u>	<u>Gordon@anderson.org</u>
<u>Steve Bowman</u>	<u>DNR/Utah Geological Survey</u>	<u>stevewb@utah.gov</u>
<u>Susan Smart</u>	<u>LCFD ref.</u>	<u>bsjmart@juwc.com</u>
<u>Ken Theis</u>	<u>FFSL - BPA</u>	<u>ktheis@utah.gov</u>
<u>Matt Coombs</u>	<u>FFSL - BPA</u>	<u>matthcoombs@utah.gov</u>
<u>Alan Luce</u>	<u>North Logan City</u>	<u>alan@northlogancity.org</u>
<u>Jordan Oldham</u>	<u>North Logan</u>	<u>jordan@nrlb.org</u>
<u>James Turner</u>	<u>USFS Logan Ranger District</u>	<u>James.C.TURNER@USDA.gov</u>
<u>Brandon Webb</u>	<u>FFMA</u>	<u>brandon.webb2@fema.dhs.gov</u>

AGENDA

RICH COUNTY MITIGATION STRATEGIES MEETING

2020 Pre-Disaster Mitigation Plan Update

Tuesday, January 7, 2020 – from 5:00 to 7:00 PM

Garden City Offices
Lakeview Conference Room (North bldg.)
69 N. Paradise Parkway
Garden City, UT 84028

5:00 P.M.	Welcome and Introductions	BRYCE NIELSON - <i>Rich County Emergency Manager</i>
5:10 P.M.	FEMA-Approved Mitigation Strategies and Flood Ordinances	EMBER HERRICK - <i>Utah Department of Public Safety</i>
5:40 P.M.	Geologic Hazards Model Ordinance	STEVE BOWMAN - <i>Utah Geological Survey</i>
6:00 P.M.	<i>DINNER (Provided)</i>	
6:20 P.M.	Community Potential Loss Analysis	ZAC COVINGTON <i>Bear River Association of Governments</i>
6:40 P.M.	Mitigation Strategies Exercise	<i>Zac Covington</i>
6:55 P.M.	Next Steps	BRYCE NIELSON
7:00 P.M.	Adjourn	

1/7/20 RC MS Meeting Attendance List

<u>Name</u>	<u>Organization</u>	<u>E-mail Address</u>
MIKE WAHLBERG	GARDEN CITY FIRE DIST.	gardencityfiredistrict@gmail.com
Kevin Barjenbruch	NWS WFO Salt Lake City, UT	kevin.barjenbruch@noaa.gov
Ken Treis	FFSL - BRA	ktreis@utah.gov
DAW AUES	FFSL / RICH CO.	dawnaues@utah.gov
JAMES TURNER	USFS / LOGAN RD FIRE	JAMES.C.TURNER@USDA.GOV
Steve Bauman	Utah Geological Survey, DNR	stevebauman@utah.gov
Ed Dop S. KEARL	Rich - Bld. E-Com	EDDOP.S.KEARL@gmail.com
Taylor M. Payne	Dept. Ag & Food	taylor.payne@utah.gov
Kimberly Giles	State Div. of Energy Mgmt.	kgiles@utah.gov
Bill Cox	Rich County	scaring@allwest.net
Mike Leachardt	Garden City Mayor	Mike@GardenCityUtah.us
Sim Weston	Rich County	panderosa_03@yahoo.com
Byce Nielson	Rich Co EM	byce.nielson@gmail.com
Kristin Bays	Bear Lake Community Health Center	kba@cbhc.org
Phil Collins	NORTHERN UTAH HERITAGE CAUTION	PCOLLINS@BETH.ORG
Scott McComb	Bear River Association of Govts	scottm@brg.utah.gov
Ember Harris	Utah DEM	
DL	BRA	

AGENDA

REGIONAL DRAFT PDM PLAN AND PLAN ADOPTION MEETING

2020 Pre-Disaster Mitigation Plan Update

Wednesday, October 14th, 2020 – from 5:00 to 7:00 PM

Zoom Meeting – See Accompanying E-mail for Details or E-mail zaccebrag.utah.gov

5:00 P.M.	DRAFT Plan Presentation and Plan Adoption	ZAC COVINGTON – <i>Bear River Association of Governments</i>
5:40 P.M.	Plan Implementation and Funding	ERIC MARTINEAU – <i>Utah Department of Public Safety</i>
6:00 P.M.	Geologic Hazards Model Ordinance	STEVE BOWMAN – <i>Utah Geological Survey</i>
6:20 P.M.	Floodplain Protection Model Ordinance	KATHY HOLDER <i>Utah Department of Public Safety</i>
6:40 P.M.	Q and A	ALL
7:00 P.M.	Adjourn	

Zoom Group Chat

From [Sharidean Flint](#) to [Everyone](#):
This website is great! Very handy.

From [Terrie](#) to [Everyone](#):
I agree; so much more user friendly
than the paper version.

From [Chris Harrild](#) to [Everyone](#):
Love the web page approach - great
work BRAG team!

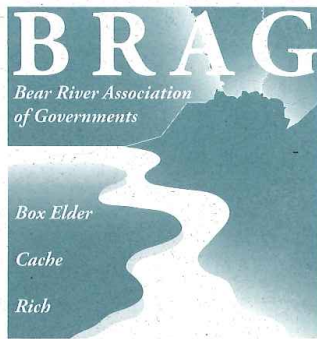
From [Me](#) to [Everyone](#):
Glad to hear it will be useful! It
certainly is more fun to look through,
and I think it will be a great addition!

To: [Everyone](#) ▼

File

...

Type message here...



BEAR RIVER ASSOCIATION OF GOVERNMENTS

170 N. Main, Logan, Utah 84321 ♦ (435) 752-7242 ♦ Fax (435) 752-6962 ♦ www.brag.utah.gov

GOVERNING BOARD MEETING

Wednesday, March 25, 2020 – 12 Noon
Utah State University Brigham City
989 South Main Street in Brigham City
Second Floor, Room A 201

EXECUTIVE DIRECTOR
 Roger C. Jones

AGENDA

BOX ELDER COUNTY

Roger Fridal
Mayor of Tremonton
 Jeff Hadfield
County Commissioner
 Jeff Scott
County Commissioner
 Stan Summers
County Commissioner
 Tyler Vincent
Mayor of Brigham City

CACHE COUNTY

Paul Borup
County Council Member
 Craig Buttars
County Executive
 Holly Daines
Mayor of Logan
 Jeff Young
Mayor of Richmond
 Karl Ward
County Council Member

RICH COUNTY

William (Bill) Cox
County Commissioner
 Mike Leonhardt
Mayor of Garden City
 Scott Sabey
Mayor of Woodruff
 Norman (Norm) Weston
County Commissioner
 Simeon (Sim) Weston
County Commissioner

- | | |
|--------------|--|
| 12:00 | Welcome, Introductions and Minutes
Mayor Mike Leonhardt, Chair |
| 12:05 | Welcome to USU Brigham City
Dr. Dan Black, Assistant Vice President |
| 12:15 | Rural Economic Development and New Legislation
Rebecca Dilg, Rural Community Outreach, GOED |
| 12:25 | Planning Data for Rural Utah/PILT Fair Value
Ken Ivory, AEON AI, Senior Vice President |
| 12:45 | Community Development Block Grant (CDBG)
Brian Carver, BRAG Community and Economic Development Director
Second Public Hearing to Gather Input on Projects to Be Sponsored by BRAG
Rating and Ranking of Applicant Projects |
| 12:55 | Progress on Natural Hazard Mitigation Plans
Brian Carver |
| 1:00 | BRAG Housing Authority Five Year Plan
Tricia Fuller, Housing Authority Director
Public Hearing on Five Year Public Housing Authority Plan |
| 1:10 | Status of BRAG Owned Housing and Housing Rehabilitation
Jeff Kearl, Housing Rehabilitation and Development Director |
| 1:20 | Other Business |
| 1:30 | Adjourn |

Auxiliary aids and services are available upon request to individuals with disabilities by calling Karen Merkley at the BRAG office, (435) 752-7242 or (877) 772-7242 at least three working days prior to the meeting. Individuals with speech and/or hearing impairments may call Relay Utah by dialing 7-1-1 to use Hamilton Relay or call toll free TTY# 1 (800) 346-4128. Spanish Relay Utah: 1-888-346-3162.

Serving Northern Utah Since 1971

Aging Services ♦ Community Development & Planning ♦ Economic Development ♦ Housing & Human Services

GOVERNING BOARD MEETING

Wednesday, March 25, 2020 – 12 Noon

Teleconference Meeting

Call 1-408-533-8466 to Join

Meeting ID: 857185063#

MINUTES

PRESENT ON THE CALL

Council Member Paul Borup
County Executive Craig Butters
Commissioner Bill Cox
Mayor Holly Daines
Mayor Roger Fridal
Mayor Mike Leonhardt

Commissioner Jeff Scott
Commissioner Stan Summers
Commissioner Sim Weston
Commissioner Norm Weston
Council Member Karl Ward
Mayor Tyler Vincent

EXCUSED

Commissioner Jeff Hadfield

BRAG STAFF ON THE CALL

Roger Jones
Brian Carver
Karen Merkley
Paul Davis

Tricia Fuller
Zac Covington
Jeff Kearn

OTHERS ON THE CALL

Lloyd Bertentzen
Rebecca Dilg
Ken Ivory
Nathan Jackson
Matt Anderson
Representative Dan Johnson
Chris Chestnut
Tami Leonhardt
Several Unknown Callers

Bear River Health Department
Rural Community Outreach, GOED
AEON AI
Senator Mike Lee's Office
Senator Mitt Romney's Office
District 4
Utah Department of Transportation Region 1
Director of Tourism, Bear Lake

WELCOME, INTRODUCTIONS, AND MINUTES

Mayor Mike Leonhardt, Chair, opened the meeting. He welcomed everyone to the first ever BRAG Governing Board Teleconference Meeting. A Roll Call was taken to identify board members in attendance via phone or computer. Other guests stated their names as also participating in the meeting.

Leonhardt asked if there were any changes or additions to the minutes of the January 15, 2020 Governing Board meeting. The minutes were **APPROVED** unanimously with a **MOTION** by Mayor Tyler Vincent and **SECOND** by Mayor Holly Daines.

GOVERNING BOARD MEETING

Thursday, August 13, 2020 - 12 noon
Garden City Town Hall - Bldg A, 2nd Floor Mt. View Room
69 North Paradise Parkway in Garden City

A G E N D A

- 12:00 Welcome, Introductions and Minutes**
Mayor Mike Leonhardt, Chair
- 12:05 Rich County Tourism Update**
Tami Leonhardt, Executive Director, Bear Lake Valley Conference
& Tourism Bureau
- 12:20 Garden City Growth & Infrastructure Projects**
Mayor Mike Leonhardt
- 12:30 County-Wide Issues**
Commissioner William Cox, Rich County Commission Chair
- 12:40 Progress on Natural Hazard Mitigation Plans**
Zac Covington, BRAG Regional Planner
- 12:50 Pandemic Services Reports**
Lucas Martin, BRAG's Human Services Director
Brian Carver, BRAG's Community & Economic Development
Director
- 1:10 Discussion on Pandemic Related Needs and Funding Available to
Meet the Needs**
- 1:30 Other Business**
- 1:40 Meeting Schedule for Remainder of 2020**
- 1:45 Adjourn**

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Spanish Relay Utah: 1-888-346-3162

GOVERNING BOARD MEETING

Thursday, August 13, 2020 – 12 noon
Garden City Town Hall – Bldg A, 2nd Floor Mt. View Room
69 North Paradise Parkway in Garden City

MINUTES

PRESENT

Council Member Paul Borup	Commissioner Jeff Scott
County Executive Craig Buttars	Commissioner Stan Summers
Commissioner Bill Cox	Mayor Tyler Vincent
Mayor Holly Daines – via Zoom	Council Member Karl Ward
Mayor Roger Fridal	Commissioner Sim Weston
Commissioner Jeff Hadfield	Commissioner Norm Weston
Mayor Mike Leonhardt	Brigham City Council Member DJ Bott

EXCUSED

Mayor Scott Sabey
Mayor Jeff Young

BRAG STAFF PRESENT

Roger Jones	Zac Covington
Brian Carver	Lucas Martin
Karen Merkley	Adam Chandler

OTHERS PRESENT

Matt Anderson - Senator Mitt Romney's Office – via Zoom
Tami Leonhardt - Executive Director, Bear Lake Valley Conference & Tourism Bureau
Mitch Poulsen – Bear Lake Regional Commission
Monica Holdaway - Box Elder Chamber of Commerce
Christopher Chesnut - Planning Manager, Utah Department of Transportation

WELCOME, INTRODUCTIONS AND MINUTES

Mayor Mike Leonhardt, Chairman, opened the governing board meeting, welcomed everyone and introductions were made.

Mayor Leonhardt asked if there are any changes or additions to the minutes of June 24, 2020 board meeting. The minutes were **APPROVED** unanimously with a **MOTION** by Council Member Karl Ward and **SECOND** by County Executive Craig Buttars.

RICH COUNTY TOURISM UPDATE

Tami Leonhardt, Executive Director of the Bear Lake Valley Conference & Tourism Bureau, reported on the booming tourism the Bear Lake Area has had this spring and summer. The conditions of the coronavirus pandemic such as people working remotely, students participating in online classes and restrictions to many other travel destinations, has made Bear Lake a choice for many tourists and second home owners. Tami noted the tourist season started about three

**BRAG 2019 PRE-DISASTER MITIGATION PLAN UPDATE
GIS PLANNING MEETING/WORKING LUNCH**

**Thursday, January 3, 2019
12:00 Noon – 2:00 PM
Los Primos, 880 S. Main Street, Logan**

AGENDA

- **GIS tools and methodologies for natural hazards overlay analysis**
 - 2009 BRAG PDMP Methodology
 - Basic overlay/Spatial Analyst
 - 2015 BRAG PDMP Methodology
 - Model Builder and Python (Good and bad)
 - HAZUS
 - Others
- **Plan delivery/display platforms – Pro's and Con's**
 - ArcGIS Story Maps
 - Other Web based Options
 - Online Maps
 - Data overload issues
 - Organization of the data
 - How can we make it user friendly?
 - Other issues

ATTENDEES

- Chris McGinty - Assist. Dir., USU RSGIS Lab
- Cary Jenkins – Manager, Cache County GIS
- Scott McComb, BRAG
- Brian Carver, BRAG
- Zac Covington, BRAG

1/9/20 Meeting with UGS and Utah FFSL Staff

PDMP Risk Assessment/Hazards Data Meetings

Utah Dept. of Natural Resources

1594 N. Temple, SLC, UT 84114

1/9/19 from 1:30 PM to 3:30 PM

UGS Meeting Notes:

- Reference data from UGS on ArcGIS - if data is updated it will change
- Start using ArcGIS Pro
- Gordon recommended using geodatabases from now on
- USGS debris flow model – Rich G. can do pre-wildfire modeling to see where potential high risk areas are for debris flows
- Ask Jennifer about RiskMAP project updates
- Potential avalanche modeling
 - o MSU Avalanche modeling – 25 deg slope, over 5,600 feet, and other criteria
 - o Other study areas
 - Ketchum, ID
 - Vail, CO
 - Juno, AK
 - Missoula, MT
 - S.L. County ordinance
- Geologic fault special study area buffers have changed a little. For well defined/constrained faults(?):
 - o Upthrown of fault – 250 feet
 - o Downthrown – 500 feet
 - o If fault segment is less than 1000 feet long, buffer on both sides should be 1000 ft
 - o At the end of fault line, radius should be 1000 ft
 - o If two fault special study areas have a gap in between them less than the larger buffer area, the gap should be filled and considered a special study area also (see scan of sheet that Adam H. gave us at the meeting in P drive)

ATTENDEES:

- Gordon Douglass, UGS
- Jay Hill, UGS
- Richard Giraud, UGS
- Adam Hiscock, UGS
- Scott McComb, BRAG
- Zac Covington, BRAG

FFSL Meeting Notes:

- Get historical wildfire data from FFSL
- FFSL home – Fire – Utah WFRA Support (model from work)
- Could create an assessment for each municipality (Focus Area). Can do it with a special login
- New legislative requirements for funding are based on “Risk”
- Roads may be more risk for traffic issues, not necessarily structures
- Get “High” classification from Buck
- Create UWRAP account (Zac) – Professional
- FFSL to present
- FFSL to present on assistance and programs at RA or MS meetings

ATTENDEES:

- Buck Ehler, FFSL
- Michelle Baragona, FFSL
- Scott McComb, BRAG
- Zac Covington, BRAG

PRE-DISASTER MITIGATION PLAN UPDATE – UTAH DEM MTG
State Capitol – Utah DEM Office (State Office Bldg.)
Salt Lake City, UT
4/29/19 from 10:30 AM - 11:45 AM

AGENDA ITEMS:

- o Utah DEM GIS Data/HAZUS Data – load to BRAG’s external hard drive
- o Discussion on interactive webmap – what is needed to get it going? Who hosts? Who updates? Who is it for? What data do we use?
- o Discussion on online web-based plan vs hard copy plan – what does FEMA need and what is most effective and useful for local governments?

ATTENDEES:

- Brad Bartholomew, Utah DEM
- Eric Martineau, Utah DEM
- Ember Herrick, Utah DEM
- Zac Covington, BRAG

Notes from meeting with Shelby Hines (ESRI) **PDMP Website Resources and Analysis Tools**

May 2020 Phone Call

- Shelby worked for FEMA Region 8 and also has private sector experience with PDM Plans and ESRI software
- Analysis tools
 - o Proportional Division
 - o Zonal Statistics
 - o Zone Lookup
 - o Spatial Join
 - o Operations Dashboard
 - o Preparedness Solutions – in EM ArcGIS
 - o Community Resilience Dashboard
- Can submit PDM Plan to FEMA as online plan
- ArcGIS HUB may be the best option
 - o Multiple pages, maps, apps, lists, embedded content, etc.
 - o Examples of good ArcGIS HUB plans
 - Tulsa
 - South Dakota
 - Seattle
 - Tampa
 - Tucson
 - Skitown
 - ESRI Denver
 - o HUB available with ArcGIS credits online
- Can ask Joe or Shelby or Karen if there are any questions

Meeting with Northwest Band of Shoshone Reps

4/15/19 @ 10:00 AM

Tribal Office

707 N. Main, Brigham City

ATTENDEES:

- Hunter Timbimboo, EM, NWB of Shoshone
- Cale Worley, Tribal Council Member, NWB of Shoshone
- Mark Millett, BEC EM
- Kimberly Giles, Utah DEM
- Anna Boynton, Utah DEM Tribal Liaison
- Zac Covington, BRAG

NOTES:

- Put tribal section in PDM Plan – can be short but describe how tribe interfaces with communities and EM in general
- 2 Critical facilities – Air Quality Control Center, Washake Land; and Tribal office in Brigham
- Add NWB of Shoshone to BEC transit study

Meeting with Steve Bowman on 3/5/19

Geologic Hazards Datasets and Uses – UGS

- Gordon could give BRAG preliminary data for mapping and analysis for the Wasatch Fault Zone
- Quaternary fault data could be draft level by summer (east and west Cache, and east and west Bear Lake) 1:10,000 scale data?
- Epicenter data (AGRC)
- 2008 landslide susceptibility is best for landslide
- Slope: use LiDar where available
- Soils data samples only went 5' deep back in the day – very broad-brush dataset
- Use many disclaimers and caveats for data
- Jessica should have UGS flood maps by April/May (shallow groundwater – under 50'; and sandy soils)
- Use liquefaction where available – best available data

Amber Droesbeke
Clerk
Town of Laketown

Laketown Town Office
PO Box 118
10 North 200 East
Laketown, UT 84038
435.946.9000

From: support@utah.gov <support@utah.gov>
Sent: Monday, August 24, 2020 11:27 AM
To: Amber Droesbeke <clerk@laketownutah.com>
Subject: Public Notice for Town Council

Utah Public Notice

Town Council

Laketown Town Council Work Meeting Pre-Disaster Mitigation Strategy Planning

Notice Date & Time: 8/25/20 7:00 PM

Description/Agenda:

Laketown Town Council Agenda
August 25, 2020

Notice is hereby given that the Town of Laketown Town Council will hold a work meeting at 7:00 p.m. on Tuesday August 25, 2020 in the Laketown Town Office located at 10 North 200 East Laketown, Utah.

In our effort to listen and follow the directions of our STATE AND LOCAL AUTHORITIES to avoid social gatherings in groups of more than 50 people and for local governments to remain open and still provide services, the public is invited to ***PLEASE WEAR A MASK IF YOU ATTEND THIS MEETING*** Our council chamber room capacity is 16 when social distancing.

7:00 p.m. REGULAR MEETING AGENDA

1. Call to Order - Mayor Burdette Weston
2. Opening Ceremony - TBD
3. Roll Call
4. Approval of Agenda; Approval of Prior Meeting Minutes

5. QUESTIONS AND COMMENTS FOR MAYOR AND COUNCIL: Any person wishing to comment on any item not otherwise on the Agenda may address the Town Council at this point by addressing the Mayor and Town Council and giving his or her name and address for the record. Comments should be

limited to not more than three (3) minutes, unless additional time is authorized by the Mayor. Citizen groups will be asked to appoint a spokesperson. This is the time and place for any person who wishes to comment on non-agenda items. Some items brought forward to the attention of the Town Council will be turned over to the clerk to provide a response outside of the Town Council meeting.

6. OTHER ITEMS OF BUSINESS:

A. Pre-disaster Mitigation Planning with Zac Covington, Brag

7. ADJOURN

On Monday, August 24, 2020 at 11:30 a.m. a copy of the foregoing notice was posted on the Utah Public Notice website at <http://pmn.utah.gov> and on the Laketown website at www.laketownutah.com. A copy was also posted in conspicuous view in the Laketown Town Office in Laketown, Utah and on the front door, and inside and outside of the Laketown post office and at Dee's Service Station.

DATED THIS 24th day of AUGUST, 2020

In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this public hearing should notify the Laketown Town Office at (435) 946-9000, 10 North 200 East, Laketown, Utah, on Monday through Wednesday at least three working days prior to the public hearing. The office hours are 9:00 a.m. to 12:00 p.m. Individuals with speech and/or hearing impairments may call the Relay Utah by dialing 711. Spanish Relay Utah 1-888-346-3162.

Amber Droesbeke, Clerk

Notice of Special Accommodations:

NOTICE OF SPECIAL ACCOMMODATION DURING PUBLIC MEETINGS In compliance with the Americans with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify the town clerk three days before the meeting, so arrangements can be made.

Notice of Electronic or telephone participation:

NA

Other information:

Location:

10 North 200 East, Laketown, 84038

Contact information:

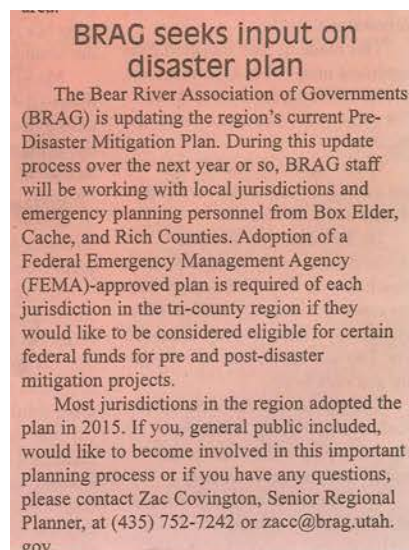
Amber Droesbeke , clerk@laketownutah.com, (435)946-9000

APPENDIX C - Newspaper PSA's, Flyers, and Other Communications

Public Service Announcement

2/25/19

The Bear River Association of Governments (BRAG) is updating the region's current Pre-Disaster Mitigation Plan. During this update process over the next year or so, BRAG staff will be working with local jurisdictions and emergency planning personnel from Box Elder, Cache, and Rich Counties. Adoption of a Federal Emergency Management Agency (FEMA)-approved plan is required of each jurisdiction in the tri-county region if they would like to be considered eligible for certain federal funds for pre and post-disaster mitigation projects. Most jurisdictions in the region adopted the plan in 2015. If you, general public included, would like to become involved in this important planning process or if you have any questions, please contact Zac Covington, Senior Regional Planner, at (435) 752-7242 or zacc@brag.utah.gov.



**Tremonton Leader
Garland Times
3/6/19 PSA**

BOX ELDER NEWS JOURNAL

PROOF OF PUBLICATION

State of Utah
Box Elder County

BRAG PRE-DISASTER MITIGATION PLAN

The Bear River Association of Governments (BRAG) is updating the region's current Pre-Disaster Mitigation Plan. During this update process over the next year or so, BRAG staff will be working with local jurisdictions and emergency planning personnel from Box Elder, Cache, and Rich Counties. Adoption of a Federal Emergency Management Agency (FEMA)-approved plan is required of each jurisdiction in the tri-county region if they would like to be considered eligible for certain federal funds for pre and post-disaster mitigation projects. Most jurisdictions in the region adopted the plan in 2015. If you, general public included, would like to become involved in this important planning process or if you have any questions, please contact Zac Covington, Senior Regional Planner, at (435) 752-7242 or zacc@brag.utah.gov.

March-6

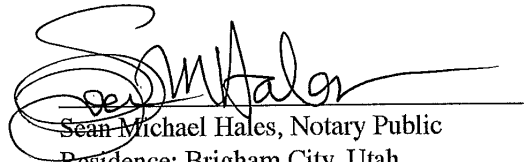
I, Casey Claybaugh, being first duly sworn depose and say that I am the Publisher of the Box Elder News Journal, a newspaper of general circulation, published every Wednesday in Brigham City, Utah, County of Box Elder; that the notice

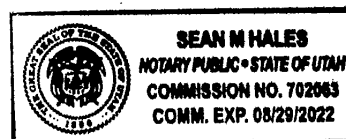
BRAG PRE-DISASTER MITIGATION PLAN of which a copy is hereto attached, was published in said newspaper, the first publication having been made on the 6th day of March 2019, and the last on the 6th day of March 2019; that said notice was published in the regular and entire issue of every number of the paper during the period and times of publication, and the same was published in the newspaper proper and not in the supplement.

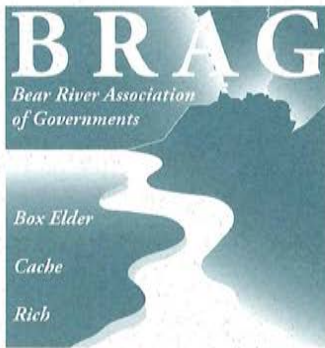
Same was also published online at utahlegals.com, according to Section 45-1-101, Utah Code Annotated beginning on the first date of publication and for 30 days thereafter.


Casey Claybaugh, Publisher

Subscribed and sworn before me this
6th day of March 2019.


Sean Michael Hales, Notary Public
Residence: Brigham City, Utah
My commission expires August 29, 2022





BEAR RIVER ASSOCIATION OF GOVERNMENTS

170 N. Main, Logan, Utah 84321 ♦ (435) 752-7242 ♦ Fax (435) 752-6962 ♦ www.brag.utah.gov

EXECUTIVE DIRECTOR
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BOX ELDER COUNTY

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CACHE COUNTY

Craig Butters
County Executive
Holly Daines
Mayor of Logan
Shaun Dustin
Mayor of Nibley
Greg Merrill
County Council Member
Karl Ward
County Council Member

RICH COUNTY

William (Bill) Cox
County Commissioner
Mike Leonhardt
Mayor of Garden City
Norman A. Weston
County Commissioner
Simeon (Sim) Weston
Mayor of Laketown
Thomas J. Weston
County Commissioner

April 1, 2019

To Whom It May Concern:

This letter is being sent to inform you of hazard mitigation planning activities in Box Elder, Cache, and Rich Counties in northern Utah, otherwise known as the Bear River Region. As a state or county entity that borders the project boundary, we welcome any input you may have on this important project.

Over the next year or so, Bear River Association of Governments (BRAG) will be updating the regional Pre-Disaster Mitigation Plan for local jurisdictions in the Bear River Region. This plan documents potential risks to residents and property from natural disasters and helps communities strategize on how to mitigate those risks. The current version of the plan is available to download at http://brag.utah.gov/wp-content/uploads/2015/08/BRAG_PDM_Plan_FINAL_8-17-15.pdf, or at the BRAG office at 170 N. Main in Logan, Utah.

In order to create an effective plan for local jurisdictions and interested special service districts, we are holding a series of meetings to gather input from various levels of government, land managers, local citizens, and other interested parties. At the end of this planning process, local governments will have the opportunity to adopt the plan, which they will need to do in order to be eligible for certain federal pre- and post-disaster grants in the future.

If you are interested in being involved in this planning process and would like to be added to our contact lists, please call me at (435) 713-1423, or e-mail at zacc@brag.utah.gov.

Sincerely,

Zac Covington
Sr. Regional Planner

Letter sent via e-mail on 4-1-19 to the following surrounding states and counties: Idaho, Nevada, Wyoming, Elko County, Cassia County, Uinta County, Oneida County, Franklin County, Bear Lake County, Lincoln County

Serving Northern Utah Since 1971

Aging Services ♦ Community Development & Planning ♦ Economic Development ♦ Housing & Human Services

PLAN GOALS

- Reduce potential losses from natural hazards (lives, property, infrastructure, critical facilities, etc.)
- Help communities comply with the Hazard Mitigation Act of 2000
- Participating communities are eligible to apply for hazard mitigation funds (75/25 federal/local)

2020 Pre-Disaster Mitigation Plan - Bear River Region, Utah

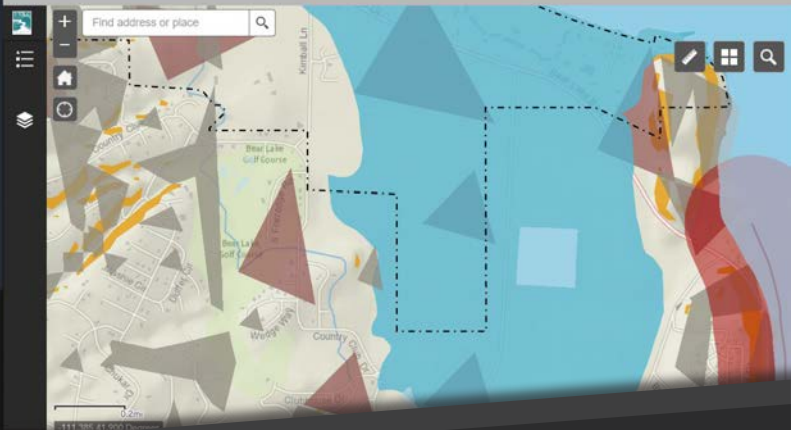
Home About the Plan The Planning Process Hazard Maps and Profiles Community Risk Assessments

1 Interactive natural hazards map

Zoom into your local community, turn on various layers, and see where natural hazards exist, and what exposure your community may have to those hazards. Remember, however, that there are other natural hazards in the region for which GIS datasets do not exist, but still create risk for local communities. Below is a table of showing hazards with available GIS data, and those without:

HAZARDS - GIS DATA	HAZARDS - NO GIS DATA
Avalanche Terrain	Air Quality
Dam Failure	Alluvial Fans
Flood (FEMA 100-Year)	Climate Change
Flood (Soils/Purdue)	Drought
Flood (Valley Bottom)	Insect Infestation/Plant Disease
Geologic Faults (Quaternary)	Radon
Landslide	Severe Weather
Liquefaction	Tornado
Steep Slopes	Seiche
Problem Soils (Struct. w/ Basements)	Volcanic
Problem Soils (Struct. w/o Basements)	Seasonal Population Growth
Wildfire (Utah FFSL)	*Pandemics
Wildfire (US Forest Service)	

2 Interactive historical hazard events map



What's next?

- **REVIEW DRAFT PLAN** (plan will be sent out for review in late August or early September of this year)
- **FINAL WORKING GROUP MEETING(s)** (same time as draft plan is sent out for public review - likely video/online meeting)
- **ADOPT FINAL PLAN** (communities adopt the plan in public meeting following FEMA approval)
- **IMPLEMENTATION** (communities apply for grants to pay for mitigation projects, adopt/modify natural hazard ordinances, implement risk reduction in other local planning processes and projects, etc.)

Progress at a glance

- 1 Online interactive plan almost complete (see graphic above).
- 2 Currently collecting mitigation strategies from all communities.
- 3 Draft plan will be ready for public and state review in late August/early September.

PROJECT CONTACT INFO: Zac Covington, BRAG Sr. Regional Planner - 435.713.1423 - zacc@brag.utah.gov

DRAFT Plan Announcement PSA Language

DRAFT plan language was sent to the Herald Journal, Box Elder News Journal, and the Tremonton Leader. Only the Herald Journal published to our knowledge.

DRAFT 2020 PRE-DISASTER MITIGATION PLAN FOR THE BEAR RIVER REGION

In accordance with the Disaster Mitigation Act of 2000, the regional Pre-Disaster Mitigation Plan for the Bear River Region has been updated. The plan is now available for a 30-day public comment period ending on October 30, 2020 at 5:00 PM. The plan identifies potential natural hazards, estimates vulnerability to those hazards, and documents mitigation strategies for all participating jurisdictions located within Box Elder, Cache, and Rich Counties in northern Utah. To view the plan, click the link at the bottom of the home page of the BRAG website at www.brag.utah.gov. If you would like a hard copy of the plan, or have any comments or questions, contact Zac Covington, BRAG Sr. Regional Planner, at zacc@brag.utah.gov or call at 435.752.7242.

DRAFT Plan Announcement PSA Clippings

12/16/2020

Public comment sought on disaster mitigation plan | Government | hjnews.com

https://www.hjnews.com/news/government/public-comment-sought-on-disaster-mitigation-plan/article_b7d1bad0-1055-5d6d-bc4f-b2e669ac724f.html

Public comment sought on disaster mitigation plan

Sep 30, 2020

The Bear River Association of Governments is seeking public input on an official disaster mitigation plan in the region.

In accordance with the Disaster Mitigation Act of 2000, the regional Pre-Disaster Mitigation Plan for the region has been updated. The plan is now available for a 30-day public comment period ending at 5 p.m. Oct. 30.

The plan identifies potential natural hazards, estimates vulnerability to those hazards, and documents mitigation strategies for all participating jurisdictions located within Box Elder, Cache, and Rich counties in northern Utah. To view the plan, click the link at the bottom of the home page of the BRAG website at www.brag.utah.gov. If you would like a hard copy of the plan or have any comments or questions, contact Zac Covington, BRAG Sr. Regional Planner, at zacc@brag.utah.gov or call at (435)752.7242.

APPENDIX D – Detailed Risk Assessment Methodology

2020 PDMP Update GIS Risk Assessment Methodology

(See “GIS Data Citations” table for layer-specific information)

SOFTWARE

- ArcGIS Pro

Note: All feature layers were projected in UTM NAD 83 Zone 12. Some feature layers were originally Point/Line/PolygonZ or Point/Line/PolygonZM types in the Shape field. Those feature layers had to be exported as new feature layers, and in the environments tab, M and Z values had to be disabled. If not, problems occurred at various steps in the analysis.

DATA PREPARATION

- NATURAL HAZARDS LAYERS
 - Converted all natural hazards layers to geodatabase features within one regional geodatabase
 - Merged all polygons in each feature layer in “Editor” which created one huge polygon per hazard layer.
 - Deleted all unnecessary fields for each feature layer
- CRITICAL FACILITIES
 - Points
 - Residential/Commercial
 - Extracted residential and commercial points from AGRC Address Points layer
 - Joined (tabular) residential and commercial point layer to current county assessors data for each county via Parcel ID Number
 - Added the following fields (all Text except for CMV which was Double): Name, Type, Category, CMV, and Notes
 - Populated CMV with Current Market Value data (structure and property values combined)
 - Populated all other necessary fields
 - Converted into one geodatabase
 - Critical Facilities (CF)
 - For each individual CF feature layer, added the following fields (all Text): Name, Type, Category, and Notes
 - Populated all necessary fields
 - Deleted all unnecessary fields
 - Merged all CF feature layers and converted into geodatabase
 - Lines
 - Merged each type of CF line feature into regional feature (i.e., all sewer in one, all roads in one, all natural gas lines in one, etc.)

- For each individual regional CF line feature layer, added the following fields: Name, Type, Category, Notes, and Miles (Miles as Double – all others Text)
 - Populated all necessary fields
 - Deleted all unnecessary fields
 - Left Miles field empty – populated later
 - Converted each CF line feature layer into geodatabase
 - Created new geodatabase line feature
 - Copied and pasted each regional CF line feature into new geodatabase to retain original line shapes
- o Polygons
- Merged each type of CF polygon feature into regional feature (i.e., all lakes in one, all groundwater recharge in one, etc.)
 - For each individual regional CF polygon feature layer, added the following fields: Name, Type, Category, Notes, and Acres (Acres as Double, all others Text)
 - Populated all necessary fields
 - Deleted all unnecessary fields
 - Left Acres field empty – populated later
 - Converted each CF polygon feature layer into geodatabase
 - Created new geodatabase polygon feature with same five fields as individual feature layers
 - Copied and pasted each regional CF polygon feature into new geodatabase to retain original polygon shapes

***Risk assessment methodology note:** Early in the process, the first methodology was used for Rich and Box Elder County analyses, then modified for the Cache County analysis to be more efficient and to make recording data faster and easier. However, the same overall process was used and the same type of data extracted. Results from both methodologies were compared early on in the Cache County analysis to ensure data consistency and uniformity.

RISK ASSESSMENT METHODOLOGY #1 (for Rich and Box Elder Counties)

- Batch clipped each hazard feature layer by jurisdiction (gave an individual hazard layer per jurisdiction)
- Selected residential and commercial point layer by location by each hazard layer per jurisdiction
- Exported table of selected points to .dbf and used MS Excel to tabulate number and value for residential and commercial points, respectively
- Selected CF point layer by location by each hazard layer per jurisdiction
- Exported summary table (summary statistics) of selection only by type (field) and count (statistic type) – set case field as type – and tabularized data
- Batch clipped CF lines by jurisdiction by hazard layer
- Batch calculated miles in Miles field (python script: “!shape.length@miles!”)

- Batch clipped CF Polygons by jurisdiction by hazard layer
- Batch calculated acres in Acres field (python script: “!shape.area@acres!”)

RISK ASSESSMENT METHODOLOGY #2 (for Cache County)

- Added Hazard field (Text) to each regional hazard geodatabase feature layer
- Populated Hazard field with hazard name
- Created new geodatabase polygon feature and added Hazard field (Text)
- Copied and pasted regional hazards feature layers into new geodatabase feature layer
- Clipped regional hazards geodatabase feature layer by jurisdiction (or batch clip all at beginning)
- Spatial Join with residential and commercial points (Target Feature) and the hazard feature layer (Join Feature) for the respective jurisdiction (Join Operation – One to Many; Match Option – Completely Within)
- Selected by attributes on new join file for each hazard and each type (commercial or residential) respectively
- Ran statistics on CMV (current market value) field of selected points and recorded number and value
- Did Spatial Join with CF points (Target Feature) and the hazard feature layer (Join Feature) for the respective jurisdiction (Join Operation – One to Many; Match Option – Completely Within)
- Did Summary Statistics by Type (Field) and Count (Statistic Type) and Hazard and Type as Case Fields and exported as .dbf
- Extracted values from MS Excel
- Batch Clipped (by Input Feature) each Hazard Feature Layer (not the regional feature layer created earlier, but the original individual hazard feature layers) by each jurisdiction
- Batch Clipped (by Clip Feature) CF line and CF polygon feature layers, respectively, by each jurisdictional hazard feature layer
- Batch Calculated Miles and Acres for each CF line and CF Polygon feature layer, respectively.
- Extracted miles and acreage from attribute table

APPENDIX E - GIS Data Sources

2020 Bear River Region Pre-Disaster Mitigation Plan Update - GIS Data Sources

	GIS Dataset	Source	Criteria	Other Notes
Critical Facility, Building, Infrastructure, and Other Asset Datasets	Farmland	NRCS SSURGO	Farmland of prime, local, unique and statewide importance.	
	Grazing Allotments	AGRC	Public land grazing allotments.	
	Home	Utah AGRC/Counties	AGRC address points joined with county assessors data. Unknown data points or points with incomplete value data were deleted.	
	Cemetery	Utah AGRC		
	Commercial Business	Utah AGRC/Counties	AGRC address points joined with county assessors data. Unknown data points or points with incomplete value data were deleted.	
	Library	Utah AGRC		
	Place of Worship	Utah AGRC		
	University/College	BRAG	Digitized	
	School	Utah AGRC		
	Correctional Facility	Utah AGRC		
	Military Facility	US Department of Defense	Military Installations, Ranges, and Training Areas (MIRTA)	
	Post Office	Utah AGRC		
	Town Hall	BRAG	Digitized	
	Campground/Recreation Facility	US Forest Service	Campgrounds, picnic areas, trailheads	
	Golf Course	Utah AGRC/BRAG	Polygon to point	
	Public Areas	BRAG	Digitized - Public gathering areas, indoor and outdoor	
	Historic Site	US Department of Interior, NRHP	Objects, sites, and structures.	
	Museum	BRAG	Digitized	
	State Park	Utah AGRC		
	Park	Utah AGRC/BRAG	Polygon to point	
	Trail	Utah AGRC/BRAG/Counties	All existing	
	Emergency Medical Service	Utah AGRC		
	Emergency Operations Center/PSAP	BRAG	County EOC's only - others included in Town Halls and Fire/Police Stations	
	Fire Station	AGRC		
	Hospital/Health Care Facility	Utah AGRC	Hospital, nursing home, assisted living, home health, outpatient, therapy, hospice, urgent care, clinic, and other facilities	
	National System Shelter Facility	Homeland Infra. Foundation-Level Data (HIFLD)		
	Law Enforcement Station	AGRC		
	Substation/Regulator	Homeland Infra. Foundation-Level Data (HIFLD)		
	Natural Gas Pipeline	Utah Geological Survey		
	Crude Oil Pipeline	Utah Geological Survey		
	Oil and Gas Well	AGRC		
	Petroleum Pipeline	Utah Geological Survey		
	Hydrogen Sulfide Pipeline	Utah Geological Survey		
	Power Generation Facility	US Energy Information Administration (EIA)		
	Transmission Line	Homeland Infra. Foundation-Level Data (HIFLD)		
	Lake/Pond	USGS, NHD Plus		
	Reservoir	USGS, NHD Plus		
	Playa	USGS, NHD Plus		
	Riparian Area	Utah AGRC, WRLU		
	Spring/Seep	USGS, NHD Plus		
	Stream/River	USGS, NHD Plus	Perennial, intermittent, and artificial paths (large rivers and some lake flows). May affect flood losses - increase unrealistically.	
	Wetland	US Fish and Wildlife Service, NWI	Freshwater emergent and forested/shrub	
	Communication Towers	Homeland Infra. Foundation-Level Data (HIFLD)	Mobile, land, microwave, paging, FM, antenna, TV,	
	Microwave Service Towers	Homeland Infra. Foundation-Level Data (HIFLD)		
	Gas Station	BRAG	Digitized	
	Sewer Pipeline	Brigham City, Hyde Park, Hyrum, Nibley, North Logan, Logan, Perry, Smithfield, Richmond, and USU Logan Campus	Main lines only	Data was only used by permission and if it was sent by local communities to BRAG staff.

Natural Hazard Datasets	Wastewater Facility	Utah AGRC/BRAG	WRLU to point	
	Contaminated Land	Utah DEQ/DERR	Brownfield	
	Hazmat Material Storage	Cache County	Box Elder and Cache County data only	
	Mines	USGS	Mines, mine plants, prospector pits, gravel pits	
	Broadband Anchors	AGRC		
	Solid Waste Facility	Utah DEQ/Utah DWMRC		
	Airport/Heliport	FAA/AGRC/BRAG		
	Bridge/Culvert/Underpass	National Bridge Inventory (HIFLD)/Railroad Bridges (HIFLD)/UDOT/Box Elder County/Cache County		
	Railroad	AGRC		
	Emergency Outlet Roads	BRAG/UDOT	Paved, regional/inter-county connections	
	Road	UDOT	All roads	
	Canal	Utah DWR	Open and piped	
	Culinary Water Pipeline	Local Communities/Counties	Main lines only. Some community data provided	Same as sewer lines.
	Culinary Water Source	Utah DEQ	Wells and springs	
	Water Tank	Cache County	Cache County data only	
	Avalanche Terrain	10 Meter DEMs, NLCD (Land Cover) 2016 - BRAG	Slopes from 30 to 45 degrees (58 to 100%), elevation over 5,500 feet, and land cover types; barren Land, dwarf shrub, shrub/shrub, grassland/ herbaceous, lichens, and moss.	Not an avalanche risk map. Only shows common terrain characteristics.
	Dam Failure	Dam Inundation	PMF, Estimated, and Sunny all merged.	No data for Neponset Reservoir in Rich County, but there is likely increased risk to local communities downstream.
	Flood - FEMA	FEMA 100-year/ methodology from / data	A/AE/A FEMA floodplain layers.	No Rich County data except for Woodruff Town. No eastern Box Elder County data.
	Flood - Soils	SSURGO soils methodology - Purdue University study	Water bodies, fluvial soils/ geomorphology, and flood frequency >100 years.	Based on the methodology included in the Purdue University thesis by Nikhil Sangwan, titled, "Floodplain Mapping Using Soil Survey Geographic (SSURGO) Database (2013).
	Flood - USU	USU valley bottom delineation dataset	USU methodology	Jordan T. Gilbert, William W. Macfarlane, Joseph M. Wheaton, The Valley Bottom Extraction Tool (V-BET): A GIS tool for delineating valley bottoms across entire drainage networks, Computers & Geosciences, Volume 97, December 2016, Pages 1-14, ISSN 0098-3004, http://dx.doi.org/10.1016/j.cageo.2016.07.014 .
	Geologic - Faults	Quaternary Faults - 1,000 ft buffer, both sides.	1,000 foot buffer on all quaternary faults, including 2019 Wasatch Fault data from UGS in eastern Box Elder County.	
	Geologic - Landslide/debris flow	UGS Landslide susceptibility data (2007)	Moderate and high.	
	Geologic - Steep Slopes	10 Meter DEM	30%+ Slope.	
	Geologic - Liquefaction	UGS dataset	Moderate/moderate high/high.	No data for eastern Box Elder or Rich County.
	Problem Soils - Structures with basements	SSURGO soils database	Engineering dominant condition - somewhat and very limited.	
	Problem Soils - Structures without basements	SSURGO soils database	Engineering dominant condition - somewhat and very limited.	
	Wildfire - Utah FFSL	Wildfire threat - UWRAP dataset.	Moderate/high.	Shows no Rich County risk.
	Wildfire - US Forest Service	"Wildfire Hazard Potential" dataset, 2017	Moderate/high/very high.	Shows more risk areas.
*All data collected in 2019 and 2020 unless otherwise noted. Reference specific data sources for more information.				

APPENDIX F - Historical Hazard Events Database

Due to size constraints, please view in the Appendix of the online plan at:
http://brag.utah.gov/wp-content/uploads/1847-2020_BRR_Historical_Hazards_Event_Data_2020PDMP.pdf

For more information, or for a copy of the original spreadsheet, contact
Zac Covington at 435-713-1423, or zaccebrag.utah.gov

APPENDIX G - Regional BCEGS Scores 2008

Building Code Effectiveness Grading Report (BCEGS) Scores for the Bear River Region (2008)		
Jurisdiction Name	Score	Date
Box Elder County	RES 04 COM 04	2001
Brigham City	RES 03 COM 03	2001
Tremonton	RES 05 COM 05	2000
Willard	RES 05 COM 05	1998
Cache County	RES 03 COM 03	2001
Hyde Park	RES 03 COM 03	2001
Logan City	RES 03 COM 03	1999
North Logan	RES 03 COM 03	1999
Smithfield	RES 04 COM 04	2000
Garden City	RES 99 COM 07	1998

Source: ISO (Insurance Services Office), 2008.

99 is used for jurisdictions which are either unclassified or do not meet the minimum criteria of the BCEGS program. This would include departments which do not do plan review, inspections, have legally adopted codes or have declined to participate in the ISO program.

APPENDIX H - Utah Repetitive Loss Properties

Federal Emergency Management Agency Repetitive Losses / BCX Claims UTAH

CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490001	BEAVER COUNTY*	BEAVER COUNTY	0	0		11/04/2015	0	1,450	1	0	09/18/1987	
490002	BEAVER, CITY OF	BEAVER COUNTY	0	0	11/04/2015		0	1,453	2	0	04/01/1977	
490003	MILFORD, CITY OF	BEAVER COUNTY	0	0	09/26/2019	09/22/2008	0	1,451	0	0		
490239	MINERSVILLE, TOWN OF	BEAVER COUNTY	0	0			0	448	0	0		
490194	BEAR RIVER, CITY OF	BOX ELDER COUNTY	0	0	10/01/2019		0	900	0	1	09/29/2010	
490005	BOX ELDER COUNTY*	BOX ELDER COUNTY	0	0	07/19/2017	03/23/2016	0	9,119	37	6	09/29/2010	
490006	BRIGHAM CITY, CITY OF	BOX ELDER COUNTY	0	0	09/26/2019	03/24/2016	0	18,500	5	20	09/29/2010	
490197	CORINNE, CITY OF	BOX ELDER COUNTY	0	0		07/29/2010	0	800	7	2	09/29/2010	
490236	DEWEYVILLE, CITY OF	BOX ELDER COUNTY	0	0			0	248	0	0	09/29/2010	
490007	ELWOOD, CITY OF	BOX ELDER COUNTY	0	0			0	294	2	0	09/29/2010	
490198	FIELDING, TOWN OF	BOX ELDER COUNTY	0	0			0	254	0	0	09/29/2010	
490008	HONEYVILLE, CITY OF	BOX ELDER COUNTY	0	0		07/20/2010	0	1,220	1	0	09/29/2010	
490009	MANTUA, TOWN OF	BOX ELDER COUNTY	0	0			0	1,100	0	0	09/29/2010	
490010	PERRY CITY, CITY OF	BOX ELDER COUNTY	0	0		07/01/2010	0	4,380	2	0	09/29/2010	
490203	PLYMOUTH, TOWN OF	BOX ELDER COUNTY	0	0	09/25/2019		0	203	0	0	09/29/2010	
490220	TREMONTON, CITY OF	BOX ELDER COUNTY	0	0	10/28/2019	10/19/2010	0	7,002	4	3	09/29/2010	
490011	WILLARD, CITY OF	BOX ELDER COUNTY	0	0	09/30/2019	11/16/2012	0	1,800	2	3	09/29/2010	
490195	YOST, TOWN OF	BOX ELDER COUNTY	0	0			0	51	0	0		
490013	AMALGA, TOWN OF	CACHE COUNTY	0	0	01/09/2016		0	207	0	0	05/24/2011	
490012	CACHE COUNTY*	CACHE COUNTY	0	8	10/31/2019	10/11/2018	6	6,929	119	25	05/24/2011	
490014	CLARKSTON, TOWN OF	CACHE COUNTY	0	0			0	582	13	0	05/24/2011	
490015	CORNISH, TOWN OF	CACHE COUNTY	0	0			0	173	0	0	05/24/2011	
490016	HYDE PARK, TOWN OF	CACHE COUNTY	0	0	02/11/2008	04/05/2010	0	2,532	3	5	05/24/2011	
490017	HYRUM, CITY OF	CACHE COUNTY	0	0			0	7,400	17	2	05/24/2011	
490018	LEWISTON, CITY OF	CACHE COUNTY	0	0	10/29/2019		0	1,736	0	1	05/24/2011	
490019	LOGAN, CITY OF	CACHE COUNTY	0	2	09/26/2019	06/26/2016	0	45,517	39	36	05/24/2011	YES
490020	MENDON, CITY OF	CACHE COUNTY	0	0	07/16/1993	06/26/2016	0	925	33	8	05/24/2011	
490021	MILLVILLE, TOWN OF	CACHE COUNTY	0	0	01/28/2016		0	1,750	6	0	05/24/2011	
490022	NEWTON, TOWN OF	CACHE COUNTY	0	0		04/05/2010	0	750	1	0	05/24/2011	
490023	NIBLEY, TOWN OF	CACHE COUNTY	0	0	11/17/2016	06/07/2016	0	1,050	40	6	05/24/2011	
490024	NORTH LOGAN, CITY OF	CACHE COUNTY	0	0		07/05/2016	0	7,558	2	3	05/24/2011	
490025	PARADISE, TOWN OF	CACHE COUNTY	0	0		06/27/2016	0	950	11	0	05/24/2011	
490226	PROVIDENCE, CITY OF	CACHE COUNTY	0	0	07/02/2018		0	4,845	33	6	05/24/2011	
490027	RICHMOND, CITY OF	CACHE COUNTY	0	0	03/23/2016		0	2,150	14	1	05/24/2011	
490240	RIVER HEIGHTS, CITY OF	CACHE COUNTY	0	0	08/26/2008		0	1,650	4	0	05/24/2011	
490029	SMITHFIELD, CITY OF	CACHE COUNTY	0	0	03/23/2016	06/12/2010	0	9,587	61	14	05/24/2011	
490030	TRENTON, TOWN OF	CACHE COUNTY	0	0			0	390	0	0	05/24/2011	

For Official Use Only

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09/14/2020

Federal Emergency Management Agency Repetitive Losses / BCX Claims UTAH

CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490031	WELLSVILLE, CITY OF	CACHE COUNTY	0	0	10/29/2019	06/27/2016	0	3,000	60	7	05/24/2011	
490032	CARBON COUNTY *	CARBON COUNTY	0	0	09/25/2019	12/06/2017	0	22,000	7	14	05/02/2012	
490225	EAST CARBON, CITY OF	CARBON COUNTY	0	0	09/04/2018		0	1,400	2	0	05/02/2012	
490034	HELPER, CITY OF	CARBON COUNTY	0	0	08/26/2014		0	2,025	7	15	05/02/2012	
490036	PRICE, CITY OF	CARBON COUNTY	0	0	09/25/2019	02/29/2008	0	8,504	9	6	05/02/2012	
490205	SUNNYSIDE, CITY OF	CARBON COUNTY	0	0			0	400	1	0	05/02/2012	
490037	WELLINGTON, CITY OF	CARBON COUNTY	0	0			0	1,800	1	1	05/02/2012	
490230	DAGGETT COUNTY *	DAGGETT COUNTY	0	0		07/28/2016	0	921	0	1		
490039	BOUNTIFUL, CITY OF	DAVIS COUNTY	0	0	05/19/2020	08/07/2018	0	43,000	76	73	06/18/2007	YES
490040	CENTERVILLE, CITY OF	DAVIS COUNTY	1	0	10/17/2019	09/04/2015	0	16,475	38	31	06/18/2007	YES
490041	CLEARFIELD, CITY OF	DAVIS COUNTY	0	0	09/02/2014	05/31/2016	0	28,665	3	13	06/18/2007	
490042	CLINTON, CITY OF	DAVIS COUNTY	0	0		06/30/2016	0	21,750	0	8	06/18/2007	
490038	DAVIS COUNTY *	DAVIS COUNTY	0	5	09/21/2016	03/25/2014	0	2,508	43	13	06/18/2007	
490043	EAST LAYTON, CITY OF	DAVIS COUNTY	0	0			0	763	1	0		
490044	FARMINGTON, CITY OF	DAVIS COUNTY	0	0	01/30/2018	04/25/2017	0	17,000	126	60	06/18/2007	
490045	FRUIT HEIGHTS CITY, CITY OF	DAVIS COUNTY	0	0		03/27/2014	0	4,950	16	10	06/18/2007	
490046	KAYSVILLE, CITY OF	DAVIS COUNTY	0	0	10/29/2019	06/19/2014	0	22,000	70	34	06/18/2007	
490047	LAYTON, CITY OF	DAVIS COUNTY	0	0	05/11/2020	11/28/2017	0	69,529	25	61	06/18/2007	
490048	NORTH SALT LAKE, CITY OF	DAVIS COUNTY	0	0	10/08/2019	11/27/2018	0	8,500	25	29	06/18/2007	
490049	SOUTH WEBER, CITY OF	DAVIS COUNTY	0	0		06/15/2016	0	6,300	1	11	06/18/2007	
490050	SUNSET, CITY OF	DAVIS COUNTY	0	0	09/25/2019	09/04/2008	0	5,204	2	1	06/18/2007	
490051	SYRACUSE, CITY OF	DAVIS COUNTY	0	0	09/30/2019	06/30/2016	0	23,000	0	14	06/18/2007	
490052	WEST BOUNTIFUL, CITY OF	DAVIS COUNTY	0	0	12/20/2016	06/01/2016	0	5,047	20	11	06/18/2007	YES
490053	WEST POINT, CITY OF	DAVIS COUNTY	0	0		06/01/2016	0	11,000	0	4	06/18/2007	
490054	WOODS CROSS, CITY OF	DAVIS COUNTY	0	2	10/15/2019	08/31/2015	2	8,500	3	4	06/18/2007	
490055	DUCHESNE, CITY OF	DUCHESNE COUNTY	0	0		07/26/2016	0	1,450	0	0	02/04/1988	
490056	MYTON, CITY OF	DUCHESNE COUNTY	0	0		07/26/2016	0	539	4	4	02/04/1988	
490057	TABIONA, TOWN OF	DUCHESNE COUNTY	0	0			0	125	0	0		
490059	CASTLE DALE, CITY OF	EMERY COUNTY	0	0			0	1,710	0	0	05/01/1980	
490196	CLEVELAND, TOWN OF	EMERY COUNTY	0	0			0	525	2	1	07/12/1977	
490058	EMERY COUNTY*	EMERY COUNTY	0	0	06/24/2020		0	10,610	0	2		
490060	EMERY, TOWN OF	EMERY COUNTY	0	0			0	333	0	0		
490061	FERRON, CITY OF	EMERY COUNTY	0	0	10/03/2019		0	1,650	0	1		
490062	GREEN RIVER, CITY OF	EMERY COUNTY	0	0	04/01/2010	04/08/2010	0	970	0	0	03/18/1986	
490063	HUNTINGTON, CITY OF	EMERY COUNTY	0	0	10/10/2012		0	2,000	0	0		
490064	ORANGEVILLE, CITY OF	EMERY COUNTY	0	0			0	1,400	1	5	03/01/1979	
490066	ANTIMONY, TOWN OF	GARFIELD COUNTY	0	0			0	113	0	0	04/02/1976	

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CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490067	ESCALANTE, TOWN OF	GARFIELD COUNTY	0	0			0	950	0	0	08/28/1979	
490065	GARFIELD COUNTY *	GARFIELD COUNTY	0	0	09/25/2019	08/20/2019	0	738	58	9	08/05/1986	
490068	HATCH, TOWN OF	GARFIELD COUNTY	0	0	10/02/2019		0	128	1	1	07/24/1979	
490069	HENRIEVILLE, TOWN OF	GARFIELD COUNTY	0	0			0	177	0	0	09/28/1979	
490070	PANGUITCH, CITY OF	GARFIELD COUNTY	0	0	08/19/2019		0	1,450	23	1	08/28/1979	
490071	TROPIC, TOWN OF	GARFIELD COUNTY	0	0	10/29/2019	06/30/1993	0	568	0	1	12/04/1979	
490232	GRAND COUNTY *	GRAND COUNTY	0	0	09/28/2019	08/01/2019	0	9,225	24	14	04/03/2020	
490072	MOAB, CITY OF	GRAND COUNTY	0	0	08/01/2019	07/31/2019	0	4,779	21	82	04/03/2020	YES
490074	CEDAR CITY, CITY OF	IRON COUNTY	0	0	09/25/2019	08/02/2016	0	27,786	38	31	10/16/1984	YES
490073	IRON COUNTY *	IRON COUNTY	0	2	01/12/2017	08/02/2016	2	6,985	18	53	07/17/1986	
490077	KANARRAVILLE, TOWN OF	IRON COUNTY	0	0			0	350	1	0		
490075	PARAGONAH, TOWN OF	IRON COUNTY	0	0			0	530	2	1	06/02/2005	
490076	PAROWAN, CITY OF	IRON COUNTY	0	0	10/29/2019		0	3,000	2	6	03/18/1986	
490079	EUREKA, CITY OF	JUAB COUNTY	0	0	09/26/2019	03/26/2007	0	800	8	1	12/04/2007	
490078	JUAB COUNTY*	JUAB COUNTY	0	0			0	437	3	0		
490080	LEVAN, TOWN OF	JUAB COUNTY	0	0		09/22/2008	0	750	0	2		
490081	MONA, TOWN OF	JUAB COUNTY	0	0			0	309	1	0		
490229	NEPHI, CITY OF	JUAB COUNTY	0	0		08/28/2007	0	5,139	0	0	12/04/2007	
490243	ALTON, TOWN OF	KANE COUNTY	0	0	01/29/2019	03/04/2005	0	148	0	0		
490084	GLENDAL, TOWN OF	KANE COUNTY	0	0	08/15/2018	03/04/2005	0	348	3	3	05/01/1986	
490085	KANAB, CITY OF	KANE COUNTY	0	0	08/15/2018	02/23/2005	0	5,000	13	13	08/19/1985	
490083	KANE COUNTY *	KANE COUNTY	0	0	10/29/2019	05/08/2008	0	6,523	7	26	07/01/1986	
490086	ORDERVILLE, TOWN OF	KANE COUNTY	0	0	08/15/2018	03/04/2005	0	499	0	1		
490206	DELTA, CITY OF	MILLARD COUNTY	0	0			0	3,250	0	0		
490087	FILLMORE, CITY OF	MILLARD COUNTY	0	0			0	2,260	0	0		
490200	HINCKLEY, TOWN OF	MILLARD COUNTY	0	0			0	712	0	0		
490201	HOLDEN, TOWN OF	MILLARD COUNTY	0	0	10/30/2019		0	371	2	1	03/01/1986	
490088	KANOSH, CITY OF	MILLARD COUNTY	0	0			0	480	0	0		
490246	LEAMINGTON, TOWN OF	MILLARD COUNTY	0	0			0	217	0	0	09/04/1987	
490089	MEADOW, TOWN OF	MILLARD COUNTY	0	0			0	238	0	0	07/02/1976	
490233	MILLARD COUNTY*	MILLARD COUNTY	0	0	06/24/2020		0	13,800	0	0	09/04/1987	
490090	OAK CITY, TOWN OF	MILLARD COUNTY	0	0			0	650	0	2		
490091	SCPIO, TOWN OF	MILLARD COUNTY	0	0			0	298	0	0		
490093	MORGAN CITY, CITY OF	MORGAN COUNTY	0	0	09/25/2019	06/22/2017	0	3,160	36	19	12/07/2017	
490092	MORGAN COUNTY *	MORGAN COUNTY	0	2	03/22/2018	09/15/2015	2	6,000	48	32	12/07/2017	
490095	CIRCLEVILLE, TOWN OF	PIUTE COUNTY	0	0	10/01/2019		0	505	0	1		
490096	JUNCTION, TOWN OF	PIUTE COUNTY	0	0	09/28/2019		0	135	0	1	01/16/1987	

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CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490097	KINGSTON, TOWN OF	PIUTE COUNTY	0	0			0	114	1	0	02/04/1977	
490098	MARYSVILLE, CITY OF	PIUTE COUNTY	0	0			0	400	0	2	02/05/1986	
490094	PIUTE COUNTY *	PIUTE COUNTY	0	0			0	183	1	1	03/18/1986	
490099	LAKETOWN, TOWN OF	RICH COUNTY	0	0	12/04/2019		0	234	0	0		
490100	RANDOLPH, TOWN OF	RICH COUNTY	0	0	09/26/2019		0	500	0	0		
490234	RICH COUNTY *	RICH COUNTY	0	0			0	494	0	1		
490101	WOODRUFF, TOWN OF	RICH COUNTY	0	0			0	173	0	3	07/22/1980	
490252	HERRIMAN, CITY OF	SALT LAKE COUNTY	0	0	10/28/2019	02/26/2008	0	19,516	36	11	09/25/2009	
490253	HOLLADAY CITY, CITY OF	SALT LAKE COUNTY	0	0	10/31/2019	05/21/2013	0	25,900	14	32	09/25/2009	
490211	MIDVALE, CITY OF	SALT LAKE COUNTY	0	0		03/13/2017	0	28,100	7	6	09/25/2009	
490103	MURRAY, CITY OF	SALT LAKE COUNTY	0	0	10/30/2019	03/14/2017	0	45,732	44	143	09/25/2009	
490104	RIVERTON, CITY OF	SALT LAKE COUNTY	0	0	04/01/2020	01/17/2017	0	39,000	56	23	09/25/2009	
490105	SALT LAKE CITY, CITY OF	SALT LAKE COUNTY	0	6	11/19/2019	12/13/2017	0	172,800	89	163	08/02/2012	
490102	SALT LAKE COUNTY *	SALT LAKE COUNTY	0	2	06/15/2020	02/20/2013	0	38,000	187	323	09/25/2009	
490106	SANDY CITY, CITY OF	SALT LAKE COUNTY	1	0	05/11/2020	07/14/2016	0	95,720	62	38	09/25/2009	
490107	SOUTH JORDAN, CITY OF	SALT LAKE COUNTY	0	0	10/29/2019	03/25/2016	0	48,340	70	39	09/25/2009	
490219	SOUTH SALT LAKE, CITY OF	SALT LAKE COUNTY	1	0	09/26/2019	09/05/2017	0	23,000	14	19	08/02/2012	
490248	TAYLORSVILLE, CITY OF	SALT LAKE COUNTY	0	0		01/24/2017	0	60,000	14	13	09/25/2009	
490108	WEST JORDAN, CITY OF	SALT LAKE COUNTY	0	2	09/03/2015	06/18/2015	1	94,300	61	27	09/25/2009	
490245	WEST VALLEY CITY, CITY OF	SALT LAKE COUNTY	0	0	09/25/2019	01/24/2017	0	122,900	14	104	09/25/2009	
490238	BLANDING, CITY OF	SAN JUAN COUNTY	0	0	10/29/2019		0	2,250	0	0		
490212	MONTICELLO, CITY OF	SAN JUAN COUNTY	0	0	09/25/2019		0	1,958	2	0	12/24/1976	
490109	SAN JUAN COUNTY*	SAN JUAN COUNTY	0	0			0	13,600	1	1		
490242	CENTERFIELD, CITY OF	SANPETE COUNTY	0	0			0	419	0	0	05/02/2012	
490112	EPHRAIM, CITY OF	SANPETE COUNTY	0	0	07/31/2018	06/17/2013	0	5,284	18	4	05/02/2012	
490113	FAIRVIEW, CITY OF	SANPETE COUNTY	0	0	10/31/2019		0	1,332	4	4	05/02/2012	
490114	FOUNTAIN GREEN, CITY OF	SANPETE COUNTY	0	0		03/04/2014	0	955	11	1	05/02/2012	
490115	GUNNISON, CITY OF	SANPETE COUNTY	0	0	04/16/2014	05/01/2012	0	2,950	0	2	05/02/2012	
490116	MANTI, CITY OF	SANPETE COUNTY	0	0	07/31/2018	11/14/2006	0	3,300	0	1	05/02/2012	
490117	MAYFIELD, TOWN OF	SANPETE COUNTY	0	0	03/23/2010		0	530	2	1	05/02/2012	
490118	MORONI, CITY OF	SANPETE COUNTY	0	0			0	1,180	1	0	05/02/2012	
490213	MOUNT PLEASANT, CITY OF	SANPETE COUNTY	0	0			0	2,744	5	1	05/02/2012	
490111	SANPETE COUNTY*	SANPETE COUNTY	0	0	10/28/2019	08/01/2018	0	1,195	26	5	05/02/2012	
490119	SPRING CITY, CITY OF	SANPETE COUNTY	0	0			0	850	0	2	05/02/2012	
490120	WALES, TOWN OF	SANPETE COUNTY	0	0	01/29/2019	11/14/2006	0	300	1	1	05/02/2012	
490122	ANNABELLA, TOWN OF	SEVIER COUNTY	0	0	08/08/2018		0	800	3	0	12/18/2012	
490123	AURORA, CITY OF	SEVIER COUNTY	0	0	08/08/2018		0	990	10	1	01/12/1982	

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490125	ELSINORE, TOWN OF	SEVIER COUNTY	0	0	10/29/2019	02/27/2008	0	750	0	0	12/18/2012	
490126	GLENWOOD, TOWN OF	SEVIER COUNTY	0	0	08/08/2018		0	421	1	0	07/01/1986	
490127	JOSEPH, TOWN OF	SEVIER COUNTY	0	0		04/18/2011	0	212	9	0	12/18/2012	
490128	KOOSHAREM, TOWN OF	SEVIER COUNTY	0	0		04/19/2011	0	391	0	1	12/18/2012	
490129	MONROE CITY, CITY OF	SEVIER COUNTY	0	0	03/31/2020	04/19/2011	0	1,875	6	2	12/18/2012	
490130	REDMOND, TOWN OF	SEVIER COUNTY	0	0			0	800	0	0		
490131	RICHFIELD, CITY OF	SEVIER COUNTY	0	0	10/29/2019	02/26/2008	0	5,800	15	5	12/18/2012	
490132	SALINA, CITY OF	SEVIER COUNTY	0	0			0	2,400	2	2	09/29/1986	
490121	SEVIER COUNTY *	SEVIER COUNTY	0	0	06/03/2020	02/26/2008	0	20,000	13	4	12/18/2012	
490133	SIGURD, CITY OF	SEVIER COUNTY	0	0			0	450	0	0	01/01/1986	
490135	COALVILLE, CITY OF	SUMMIT COUNTY	0	0			0	1,567	12	9	03/16/2006	
490199	FRANCIS, TOWN OF	SUMMIT COUNTY	0	0			0	268	4	1	03/16/2006	
490136	HENEFER, TOWN OF	SUMMIT COUNTY	0	0	01/25/1993		0	625	6	3	03/16/2006	
490137	KAMAS, CITY OF	SUMMIT COUNTY	0	0	04/20/2020		0	1,500	12	1	03/16/2006	
490138	OAKLEY, CITY OF	SUMMIT COUNTY	0	0	04/23/2020		0	1,465	51	7	03/16/2006	
490134	SUMMIT COUNTY *	SUMMIT COUNTY	0	0	09/26/2019	06/13/2016	0	39,951	81	88	03/16/2006	
490141	GRANTSVILLE, CITY OF	TOOELE COUNTY	0	0	09/26/2019		0	8,000	0	0	11/18/2009	
490142	OPHIR, TOWN OF	TOOELE COUNTY	0	0			0	76	0	0	11/18/2009	
490215	RUSH VALLEY, TOWN OF	TOOELE COUNTY	0	0			0	541	2	0	11/18/2009	
490144	STOCKTON, TOWN OF	TOOELE COUNTY	0	0			0	600	1	1	11/18/2009	
490140	TOOELE COUNTY *	TOOELE COUNTY	0	0	09/30/2019	03/05/2019	0	55,626	1	21	11/18/2009	
490145	TOOELE, CITY OF	TOOELE COUNTY	0	0	10/29/2019	03/05/2019	0	25,000	19	8	11/18/2009	
490146	VERNON, TOWN OF	TOOELE COUNTY	0	0			0	200	0	0	11/18/2009	
490222	WENDOVER, TOWN OF	TOOELE COUNTY	3	0	10/30/2015	02/20/2013	0	781	3	5	11/18/2009	
490148	MAESER, CITY OF	UINTAH COUNTY	0	0			0	1,248	0	0		
490147	UINTAH COUNTY*	UINTAH COUNTY	0	0	09/30/2019	07/27/2016	0	35,000	54	37	10/06/2010	
490149	VERNAL, CITY OF	UINTAH COUNTY	0	0	07/27/2016		0	8,000	19	8	10/06/2010	
490228	ALPINE, CITY OF	UTAH COUNTY	0	3	06/25/2020	06/17/2014	3	9,500	45	13	06/19/2020	
490152	AMERICAN FORK, CITY OF	UTAH COUNTY	0	0	10/02/2019	04/10/2012	0	25,596	20	11	06/19/2020	
490153	CEDAR FORT, TOWN OF	UTAH COUNTY	0	0			0	380	0	1		
490154	GENOLA, TOWN OF	UTAH COUNTY	0	0	05/28/2020		0	1,250	0	0	06/19/2020	
490155	GOSHEN, TOWN OF	UTAH COUNTY	0	0			0	459	0	0	06/19/2020	
490254	HIGHLAND, CITY OF	UTAH COUNTY	0	0	05/13/2020	06/17/2014	0	12,277	9	6	06/19/2020	
490209	LEHI, CITY OF	UTAH COUNTY	0	0	07/22/2020	04/18/2017	0	30,000	36	56	06/19/2020	
490210	LINDON, CITY OF	UTAH COUNTY	0	0	05/28/2020		0	9,300	41	12	06/19/2020	
490156	MAPLETON, CITY OF	UTAH COUNTY	0	0	11/06/2019	01/27/2010	0	6,487	4	9	06/19/2020	
490216	OREM, CITY OF	UTAH COUNTY	0	0	06/05/2017	07/19/2016	0	93,233	5	31	06/19/2020	YES

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CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490157	PAYSON, CITY OF	UTAH COUNTY	0	0	09/25/2019	06/20/2017	0	17,088	14	26	06/19/2020	
490235	PLEASANT GROVE CITY, CITY OF	UTAH COUNTY	0	0	05/21/2020	10/11/2017	0	30,000	0	11	06/19/2020	
490159	PROVO, CITY OF	UTAH COUNTY	0	2	05/27/2020	04/01/2015	2	118,581	12	96	06/19/2020	YES
490160	SALEM, CITY OF	UTAH COUNTY	0	0	09/26/2019		0	4,500	5	0	06/19/2020	
490227	SANTAQUIN, CITY OF	UTAH COUNTY	0	0			0	8,326	0	0	06/19/2020	
490241	SPANISH FORK, CITY OF	UTAH COUNTY	0	0	05/21/2020	06/21/2017	0	32,000	6	3	06/19/2020	
490163	SPRINGVILLE, CITY OF	UTAH COUNTY	0	0	02/09/2018	04/19/2017	0	25,000	14	39	06/19/2020	
495517	UTAH COUNTY *	UTAH COUNTY	0	0	09/28/2018	03/21/2017	0	9,642	30	265	06/19/2020	
490247	BLUFFDALE, CITY OF	UTAH COUNTY, SALT LAKE COUNTY	0	0	09/25/2019	08/19/2014	0	9,000	6	10	06/19/2020	
490244	DRAPER, CITY OF	UTAH COUNTY, SALT LAKE COUNTY	0	0	06/23/2009	01/17/2017	0	38,000	57	52	06/19/2020	
490165	CHARLESTON, TOWN OF	WASATCH COUNTY	0	0	10/29/2019		0	420	2	9	03/15/2012	
490166	HEBER CITY, CITY OF	WASATCH COUNTY	0	0	09/25/2019	09/08/2011	0	10,500	20	11	03/15/2012	
490167	MIDWAY, CITY OF	WASATCH COUNTY	0	0	10/29/2019	01/23/2012	0	2,121	3	12	03/15/2012	
490168	WALLSBURG, TOWN OF	WASATCH COUNTY	0	0	03/23/2010		0	211	1	0	03/15/2012	
490164	WASATCH COUNTY *	WASATCH COUNTY	0	0	10/30/2019	07/26/2017	0	5,100	28	19	03/15/2012	
490139	PARK CITY, CITY OF	WASATCH COUNTY, SUMMIT COUNTY	0	0	05/18/2016	06/18/2014	0	7,951	82	347	03/15/2012	
490169	ENTERPRISE, CITY OF	WASHINGTON COUNTY	0	0	07/15/2019	03/15/2011	0	1,600	10	4	04/02/2009	
490171	HILDALE, CITY OF	WASHINGTON COUNTY	0	0	07/15/2019	11/07/2015	0	2,921	2	9	04/02/2009	
490172	HURRICANE, CITY OF	WASHINGTON COUNTY	0	0	09/25/2019	03/07/2011	0	13,400	9	32	04/02/2009	
490173	IVINS, CITY OF	WASHINGTON COUNTY	0	0	07/15/2019	11/06/2015	0	8,200	11	44	04/02/2009	
490174	LAVERKIN, CITY OF	WASHINGTON COUNTY	0	0	10/31/2019	02/28/2009	0	5,100	5	1	04/02/2009	
490175	LEEDS, TOWN OF	WASHINGTON COUNTY	0	0		01/28/2009	0	864	2	5	04/02/2009	
490178	SANTA CLARA, CITY OF	WASHINGTON COUNTY	0	0	09/26/2019	07/17/2019	0	6,750	25	14	04/02/2009	YES
490179	SPRINGDALE, TOWN OF	WASHINGTON COUNTY	0	0	10/29/2019	11/06/2015	0	550	16	7	04/02/2009	
490177	ST. GEORGE, CITY OF	WASHINGTON COUNTY	0	0	07/23/2020	11/06/2015	0	83,745	114	197	04/02/2009	YES
490180	TOQUERVILLE, TOWN OF	WASHINGTON COUNTY	0	0	10/28/2019	03/08/2011	0	1,200	24	11	04/02/2009	
490181	VIRGIN, TOWN OF	WASHINGTON COUNTY	0	0	01/23/2019	02/22/2005	0	550	3	5	04/02/2009	
490224	WASHINGTON COUNTY *	WASHINGTON COUNTY	0	2	07/15/2019	07/18/2019	2	7,080	34	52	04/02/2009	
490182	WASHINGTON, CITY OF	WASHINGTON COUNTY	0	0	07/15/2019	08/03/2016	0	20,221	63	56	04/02/2009	
490184	BICKNELL, TOWN OF	WAYNE COUNTY	0	0			0	320	0	0		
490185	LOA, TOWN OF	WAYNE COUNTY	0	0			0	324	0	0	12/20/1974	
490186	TORREY, TOWN OF	WAYNE COUNTY	0	0			0	200	0	0		
490183	WAYNE COUNTY*	WAYNE COUNTY	0	0	10/02/2019		0	811	0	0		
490208	HARRISVILLE, CITY OF	WEBER COUNTY	0	0		08/28/2008	0	3,400	13	2	12/16/2005	
490188	HUNTSVILLE, TOWN OF	WEBER COUNTY	0	0	08/03/2016		0	553	3	0	06/02/2015	

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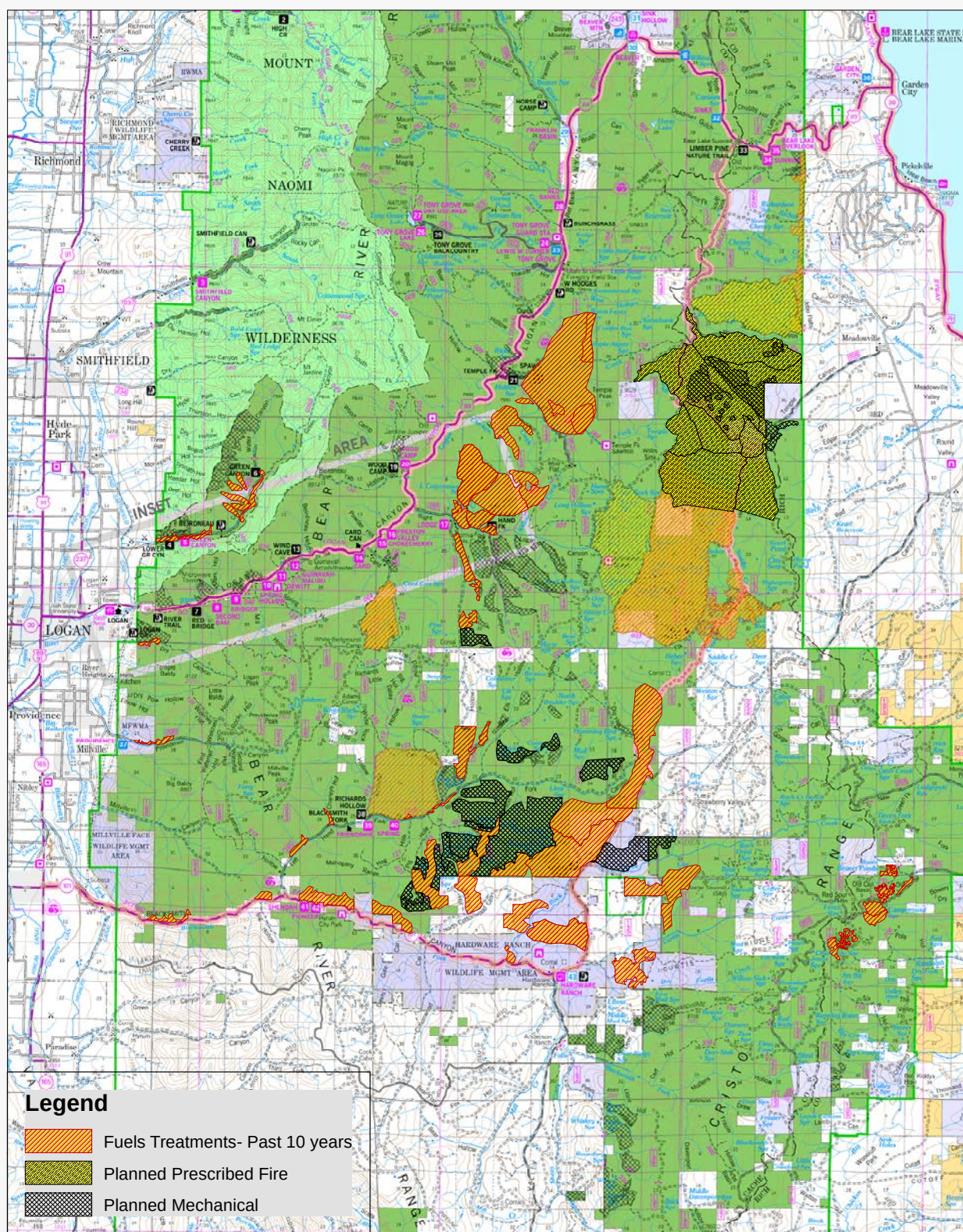
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UTAH**

CID	Community Name	County	No Of Variances	No Of Rep Losses	CAC Date	CAV Date	No Of BCX Claims	Total Area Population	LOMCS	No Of Policies	FIRM Date	CRS
490214	NORTH OGDEN, CITY OF	WEBER COUNTY	0	0	06/28/2018	12/27/2016	0	15,026	21	16	12/16/2005	YES
490189	OGDEN, CITY OF	WEBER COUNTY	0	2	12/14/2016	02/21/2017	0	79,171	73	64	06/02/2015	
490217	PLAIN CITY, CITY OF	WEBER COUNTY	0	0		08/26/2008	0	4,000	6	7	12/16/2005	
490218	PLEASANT VIEW, CITY OF	WEBER COUNTY	0	0			0	7,650	1	9	12/16/2005	
490190	RIVERDALE, CITY OF	WEBER COUNTY	0	0	10/02/2019	03/24/2016	0	8,000	23	31	06/02/2015	
490223	ROY, CITY OF	WEBER COUNTY	0	0	10/29/2019	02/27/2017	0	38,000	13	6	06/02/2015	
490191	SOUTH OGDEN, CITY OF	WEBER COUNTY	0	0		02/22/2017	0	15,000	5	9	06/02/2015	
490192	UINTAH, CITY OF	WEBER COUNTY	0	0	06/04/2020	04/05/2013	0	1,400	1	6	06/02/2015	
490221	WASHINGTON TERRACE, CITY OF	WEBER COUNTY	0	0			0	8,500	1	2	06/02/2015	
490187	WEBER COUNTY *	WEBER COUNTY	0	2	09/22/2016	02/28/2017	0	15,000	87	45	06/02/2015	YES
State Total :			230									

APPENDIX I - USFS Wildfire Fuels Reduction Map



0 1 2 4 6 8 Miles

Previous and Current Fuels Treatments

Logan Ranger District
 Uinta Wasatch Cache National Forest



Map Created January 8, 2020
 by Milena Rockwood

APPENDIX J - 2019 Utah Hazard Mitigation Plan

Natural Hazard Definitions Used in the 2020 BRR PDMP

Please visit hazards.utah.gov for more information

APPENDIX K - Community Risk Assessment Survey

PRE-DISASTER MITIGATION - RISK ASSESSMENT SURVEY

Page 1

PLEASE COMPLETE AND RETURN TO BRAG BY

(Mail: 170 N. Main, Logan UT 84321, Email: zacc@brag.utah.gov,
or FAX: (435) 752-6962 - Attention: Zac Covington)

Jurisdiction Name: _____ Completed by: _____
Address: _____ Phone: _____ Email: _____

1. Does your community participate in the National Flood Insurance Program (NFIP)?

Yes _____ No _____ Don't Know _____

2. Have there been Natural Hazard events in your community since August of 2015? If so, please describe the event(s), the severity of the event(s) (damage or intensity), and the date, if known:

3. Do you have any maps, documents, or plans related to natural hazards for your community? Please describe:

4. Please list any "critical facilities" that exist in your city/town. These critical facilities could include hospitals, schools, fire stations, water treatment plants, or other facilities that help to protect citizens.

5. Please describe any other assets (parks, historic or other buildings, natural areas, etc.) in your community that you would like to protect from natural hazard events:

6. Does your city/town currently have zoning, ordinances or other tools to address natural hazards and/or regulate construction in potentially hazardous areas?

Yes_____ No_____ Don't Know_____

If yes, please list:

7. Please circle all the hazards below that affect your community and/or you would like to have analysis completed on for this natural hazard planning process.

- Air Quality
- Agricultural
- Avalanche
- Climate Change
- Dam Failure
- Drought
- Earthquake
- Erosion
- Flood
- Hail

- Landslide
- Problem Soils and Rock
- Radon
- Severe Weather
- Subsidence
- Tornado
- Seiche
- Volcanic
- Wildfire
- Others: _____
- _____

Surveys were completed by the following communities:

- Portage
- Providence
- Bear River City
 - Millville
 - Richmond
 - Trenton
- Brigham City
 - Logan
- North Logan
 - Clarkston
 - Newton
 - Perry
- Tremonton
- Rich County
 - Lewiston
- Box Elder County
 - Garden City
 - Howell Town

*For more information, see the summary data located in Appendix K on the online plan, or contact BRAG staff at 435-752-7242.

APPENDIX L - Community Technical Capabilities

LOCAL LEVEL HAZARD MITIGATION CAPABILITY - BEAR RIVER REGION		
Jurisdiction	Professional Staffing	Technical Capacity
	(e.g. Emergency Manager, City Manager, Engineer, Planner)	(In House GIS)
BOX ELDER COUNTY	County Emergency Management Coordinator, County Planners, Public Works, Building Inspector	GIS capability and staffing
Bear River City	Volunteer\contracted consultant	None
Brigham City	Full time EM, CED Director, Planners, Public Works	GIS capability and staffing
Corinne City	Part-time City Manager	None
Deweyville Town	Volunteer\contracted consultant	None
Elwood Town	Volunteer\contracted consultant	None
Fielding Town	Volunteer\contracted consultant	None
Garland City	Part-time Emergency Manager	None
Honeyville City	Volunteer\contracted consultant	None
Howell Town	Volunteer\contracted consultant	None
Mantua Town	Volunteer\contracted consultant	None
Perry City	Full-time City Manager/Planner	None
Plymouth Town	Volunteer\contracted consultant	None
Portage Town	Volunteer\contracted consultant	None
Snowville Town	Volunteer\contracted consultant	None
Tremonton City	City Manager, City Engineer, part-time Emergency Preparedness Coordinator	CAD capability
Willard City	City Manager and Planner	None
CACHE COUNTY	County Emergency Manager, County CED Director, Planners, Public Works, Building Inspector	GIS capability and staffing
Amalga Town	Volunteer\contracted consultant	None
Clarkston Town	Volunteer\contracted consultant	None
Cornish Town	Volunteer\contracted consultant	None
Hyde Park City	Volunteer Emergency Manager, Public Works	Some GIS capability
Hyrum City	Zoning Administrator\City Manager, City Engineer, Emergency Manager	Some GIS capability
Lewiston City	Clerk/Planner, Volunteer\contracted consultant	None
Logan City	Emergency Manager, CED Director, Planners, City Engineers, & Public Works	GIS capability and staffing
Mendon City	Public Works, Volunteer\contracted consultant	None
Millville City	Public Works, Volunteer Development Coordinator	None
Newton Town	Volunteer\contracted consultant	None
Nibley City	City Manager, Planner, and Public Works	Some GIS capability
North Logan City	City Manager, Planner, Engineer, and Public Works	GIS capability and staffing
Paradise Town	Volunteer\contracted consultant	None
Providence City	City Administrator and Public Works	Some GIS capability
Richmond City	City Manager and Public Works	None
River Heights City	Public Works, Volunteer\contracted consultant	None
Smithfield City	City Manager, Zoning Admin., and Public Works	Some GIS capability
Trenton Town	Volunteer\contracted consultant	None
Wellsville City	City Manager, Volunteer/contracted consultant	None
RICH COUNTY	Countywide Planner (Bear Lake Regional Commission), Part-time Emergency Manager, Building Inspector	GIS capability
Garden City	Public Works, Building Official, Volunteer\contracted consultant	None
Laketown	Volunteer\contracted consultant	None
Randolph City	Volunteer\contracted consultant	None
Woodruff Town	Volunteer\contracted consultant	None

APPENDIX M - Signed Community Adoption Resolutions

Coming Soon!

Community Risk Assessment

2020 Pre-Disaster Mitigation Plan Update - Bear River Region

NIBLEY CITY

SUMMARY

Analysis of natural hazards in the community of Nibley revealed that the greatest potential risks come from **problem soils, steep slopes, liquefaction, landslide, flood, and wildfire**. These hazards have varied potential to impact life, property, infrastructure, and other amenities within jurisdictional boundaries. Currently, *liquefaction, flood, and wildfire* have the greatest potential to impact the community based on potential loss values (see potential loss table on the following page). Other natural hazard types not mentioned here were found to have no potential impacts to Nibley, or there was no GIS data available to analyze the hazard. See the following potential loss table, hazard maps and accompanying text for more detailed descriptions of potential risks associated with each natural hazard. For hazards that have multiple datasets, only one collective risk assessment narrative has been provided.

Disclaimer: The maps in this risk assessment are for planning and informational purposes only and are not intended for legal, engineering, or surveying purposes. Users should consult with primary data sources for additional information or to obtain more accurate data, if available. BRAG shall not be held liable for any errors or inaccuracies that may occur. Neither do they accept liability for any consequences that may result from use of the data.

NIBLEY CITY - POTENTIAL LOSSES PER NATURAL HAZARD

[illegible]

Flood - FEMA

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100-year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: This map displays the FEMA identified 100 year floodplain. For more information visit: <https://msc.fema.gov/portal/home>

RISK:

Most of the flood risk in Nibley City is located along the Blacksmith Fork River on the east side of town, and other drainages and low-lying areas. Potential losses include 467 homes, 5 businesses, 2 churches, 1 school, 2 parks, 14 communications towers, 1 gas station, 4 bridges/culverts, 10 miles of roads, 6.2 miles of canals, and other natural and agricultural assets.

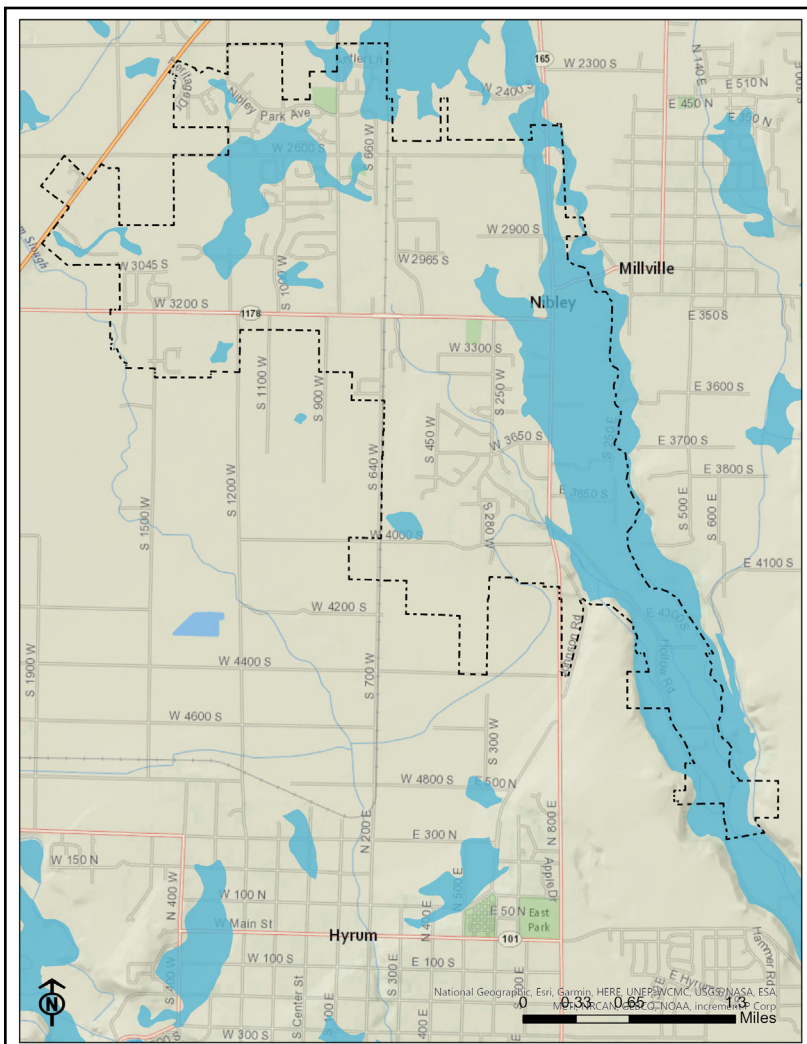


Flood - Soil

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100-year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: This map displays the 100 year floodplain based on NRCS soil survey data (<https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/>) and was identified based on research by Sangway and Merwade (<https://onlinelibrary.wiley.com/doi/abs/10.1111/1752-1688.12306>).

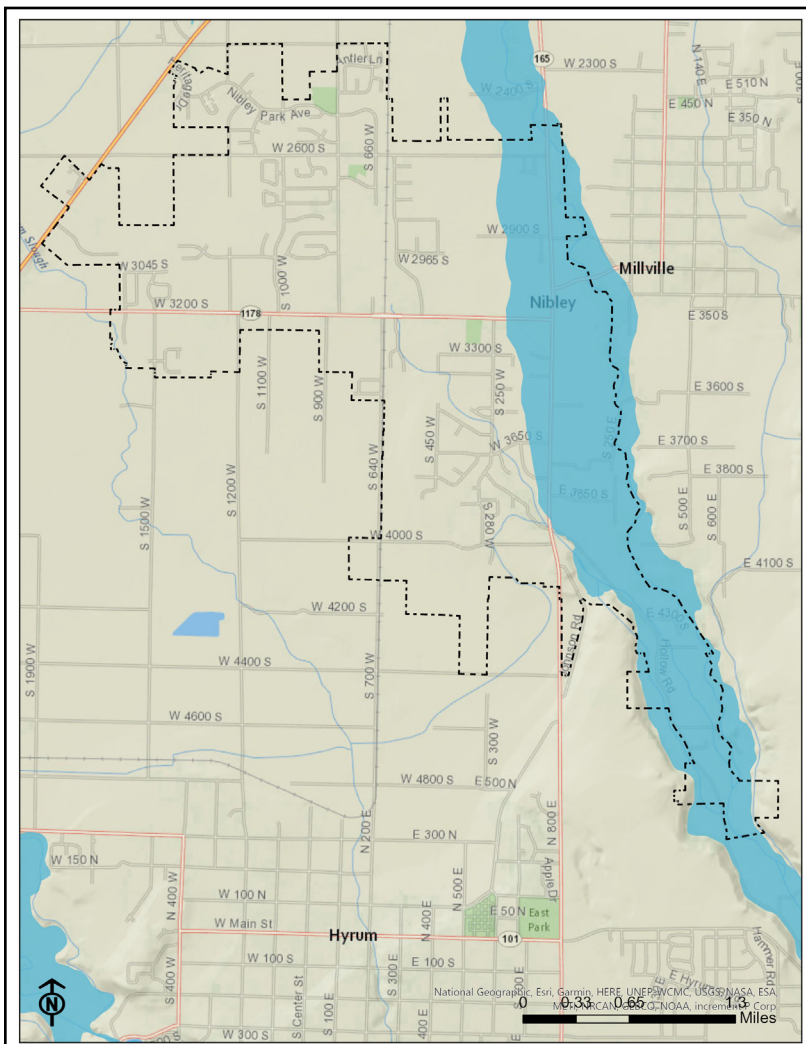


Flood - Valley Bottom

Hazard Description: A flood is an overflow of water from rivers, groundwater, or rainfall that submerges areas that are usually dry. The most common cause of flooding is due to rain or snowmelt that accumulates faster than soils can absorb it or rivers can carry it away. Flooding can also result from the failure of a water control structure, such as a levee or dam (see also Dam Failure).

A 1% Annual Chance Flood, or 100-year flood, is a flood that has a 1 percent chance or greater of occurring in any given year. Experiencing a 100-year flood does not decrease the chance of a second 100-year flood occurring that same year or any year that follows. A 100- year flood today, independent of future sea level rise and other climate change effects, has a 26 percent chance of occurring over the life of a 30-year mortgage. Similarly, a 100-year flood today has a 45 percent chance of occurring over the 60-year life of a power substation.

Map Description: The valley bottom map displays the potential flood plain based on stream networks and elevation data (<https://databasin.org/datasets/95a24aeef6a24996bf8082090fdbd831>).



Legend

 Floodplain

[-] Jurisdictional Boundary

Data Source: FEMA; Gilbert, Macfarlane & Wheaton, 2016; USDA, SSURGO

Landslide

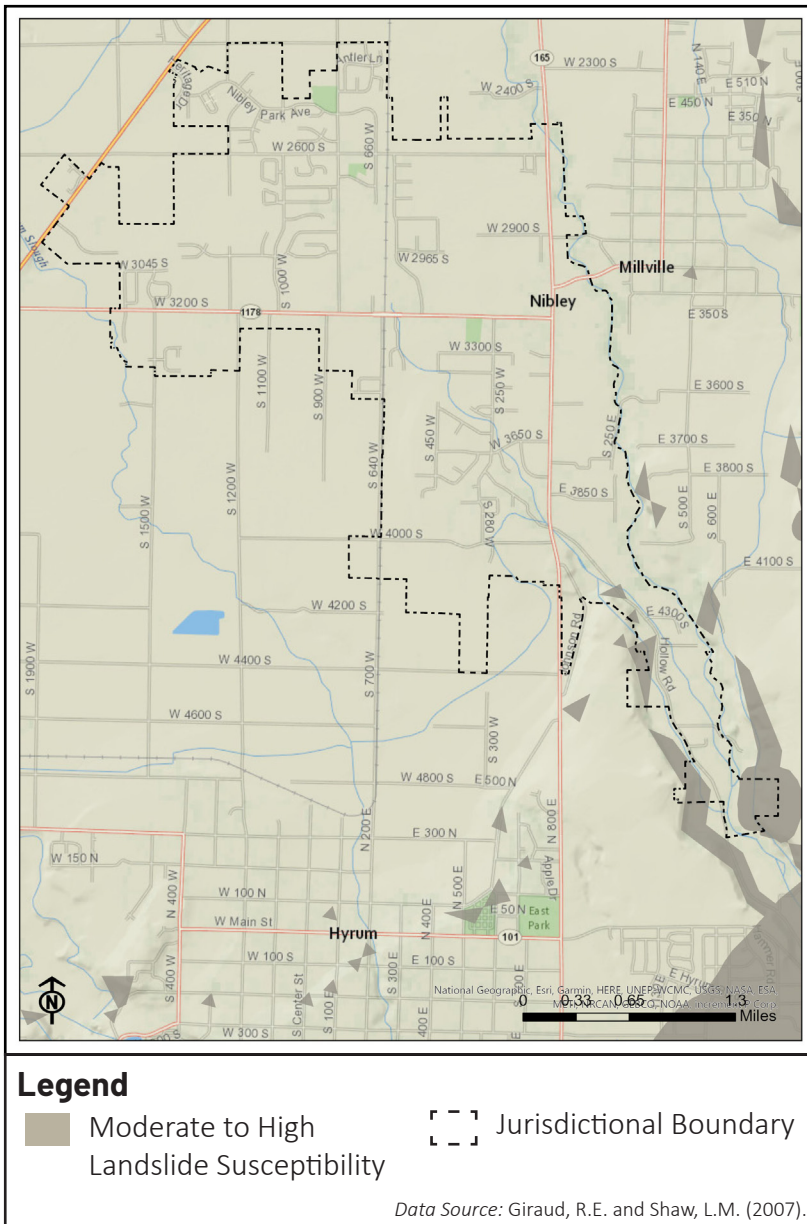
Hazard Description: A landslide is the movement of a mass of rock, debris, or earth down a slope by force of gravity. They flow rapidly, striking at avalanche speeds that can travel several miles, growing in size as they pick up trees, boulders, cars and other materials.

Landslides occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, volcanic eruptions, erosion, fire, or additional human-induced activities. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high. However, landslides can occur with very little slope, sometimes classified as earth slumping or earth flow.

Hazard Description: This map displays moderate to high landslide susceptibility based on research completed by Utah Geological Survey geologists. For more information visit: <https://ugspub.nr.utah.gov/publications/maps/m-228/m-228.pdf>

RISK:

Landslide risk is mostly along the steep banks of the Blacksmith Fork River east of town. Potential losses include 8 homes, 0.1 miles of sewer mainlines, 0.1 miles of roads, 1 mile of canals, 0.2 miles of culinary water main lines, and other natural and agricultural assets.



Liquefaction

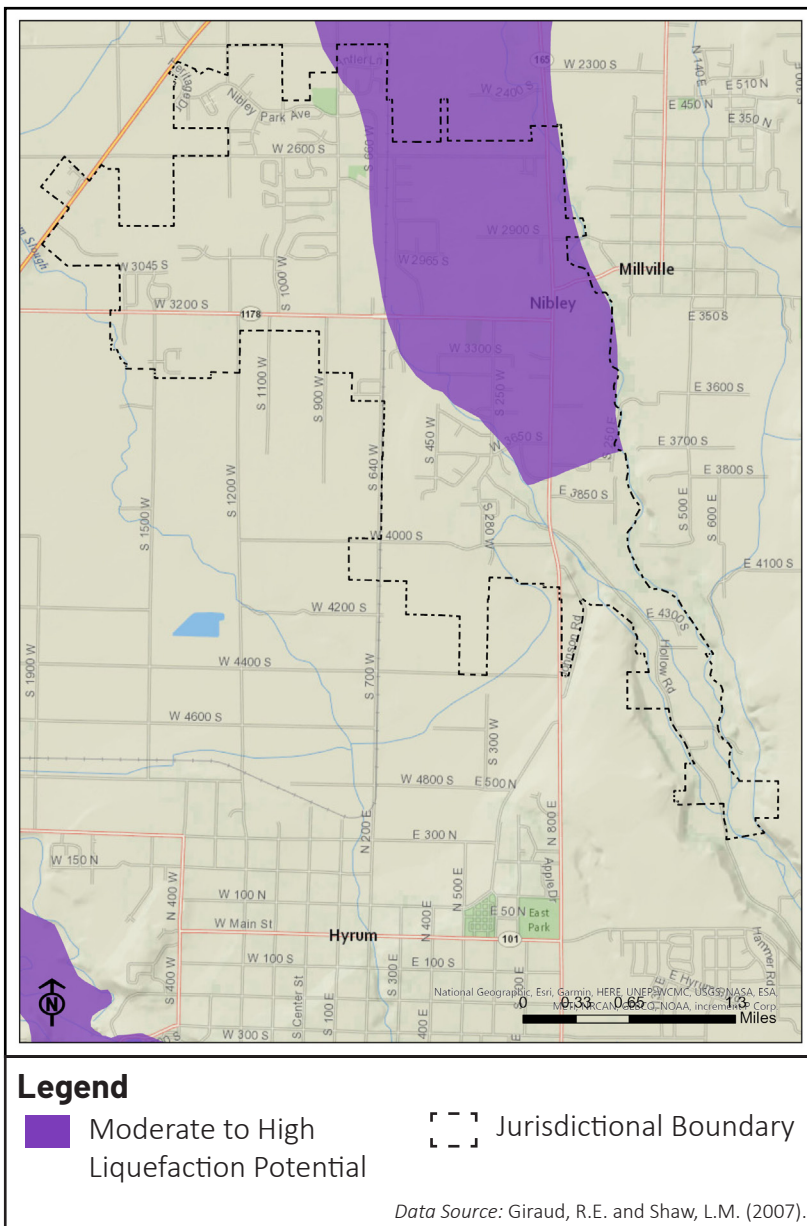
Hazard Description: Liquefaction occurs when soils that are saturated with water temporarily lose their ability to hold their structure, acting more like a viscous liquid than a solid. It mostly occurs during an earthquake and can damage anything on or in the ground, including buildings and other structures, roads, sewer and water lines, and other infrastructure.

Two conditions must be present in order for liquefaction to occur: 1) The soil must be susceptible to liquefaction, which are most often shallow (0-30 feet), and loose/sandy soils; and, 2) There must be ground shaking (such as during an earthquake) that is strong enough to loosen the soil structure.

Hazard Description: This map displays moderate to high liquefaction potential based on research completed by Utah Geological Survey geologists. For more information visit: <https://geology.utah.gov/hazards/earthquakes/liquefaction/>

RISK:

Probably the greatest risk to Nibley City from natural hazards included in this analysis is from liquefaction, which covers a good portion of the low-lying areas on the central and north areas of the city. 509 homes, 5 businesses, 3 churches, 1 school, the town hall, 2 parks, 1 emergency medical service, 0.7 miles of natural gas lines, 22 communications towers, 1 gas station, 10.8 miles of sewer main lines, 2 bridges/culverts, 1 mile of railroad, 10.4 miles of roads, 4.8 miles of canals, 11.1 miles of culinary water main lines, and other natural and agricultural amenities are at risk.



Steep Slope

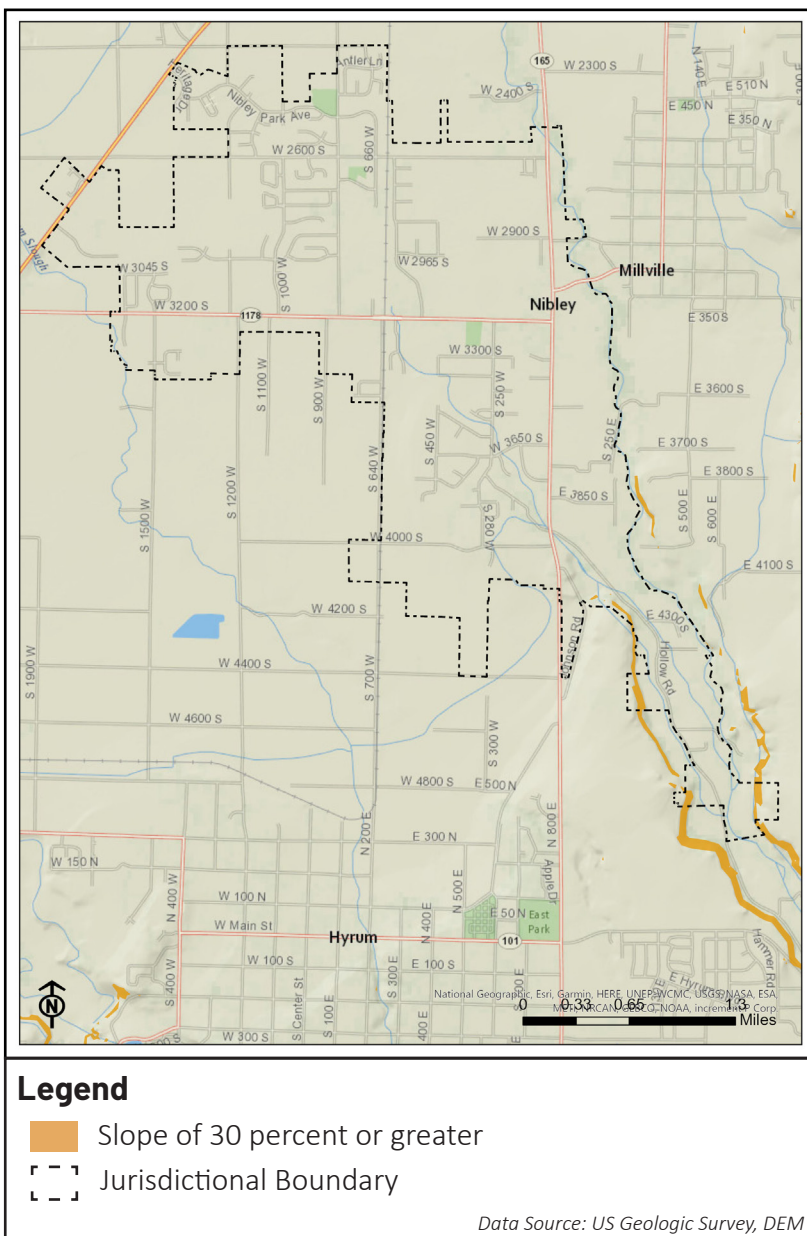
Hazard Description: A landslide is the movement of a mass of rock, debris, or earth down a slope by force of gravity. They flow rapidly, striking at avalanche speeds that can travel several miles, growing in size as they pick up trees, boulders, cars and other materials.

Landslides occur when the slope or soil stability changes from stable to unstable, which may be caused by earthquakes, storms, volcanic eruptions, erosion, fire, or additional human-induced activities. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if vegetative cover is low and/or soil water content is high. However, landslides can occur with very little slope, sometimes classified as earth slumping or earth flow.

Hazard Description: This map displays areas of steep slopes (30 percent slope or greater) and was developed using the U.S. Geologic Survey National Elevation Dataset. For more information visit: <https://www.usgs.gov/core-science-systems/national-geospatial-program/national-map>

RISK:

Risks to Nibley City from steep slopes is fairly minimal, and consist potential losses that include 0.2 miles of canals, minimal culinary water mainlines, and natural/agricultural lands.



Problem Soils (with basements)

Hazard Description: Problem soils are a group of hazards related to the specific properties of soils, and can include:

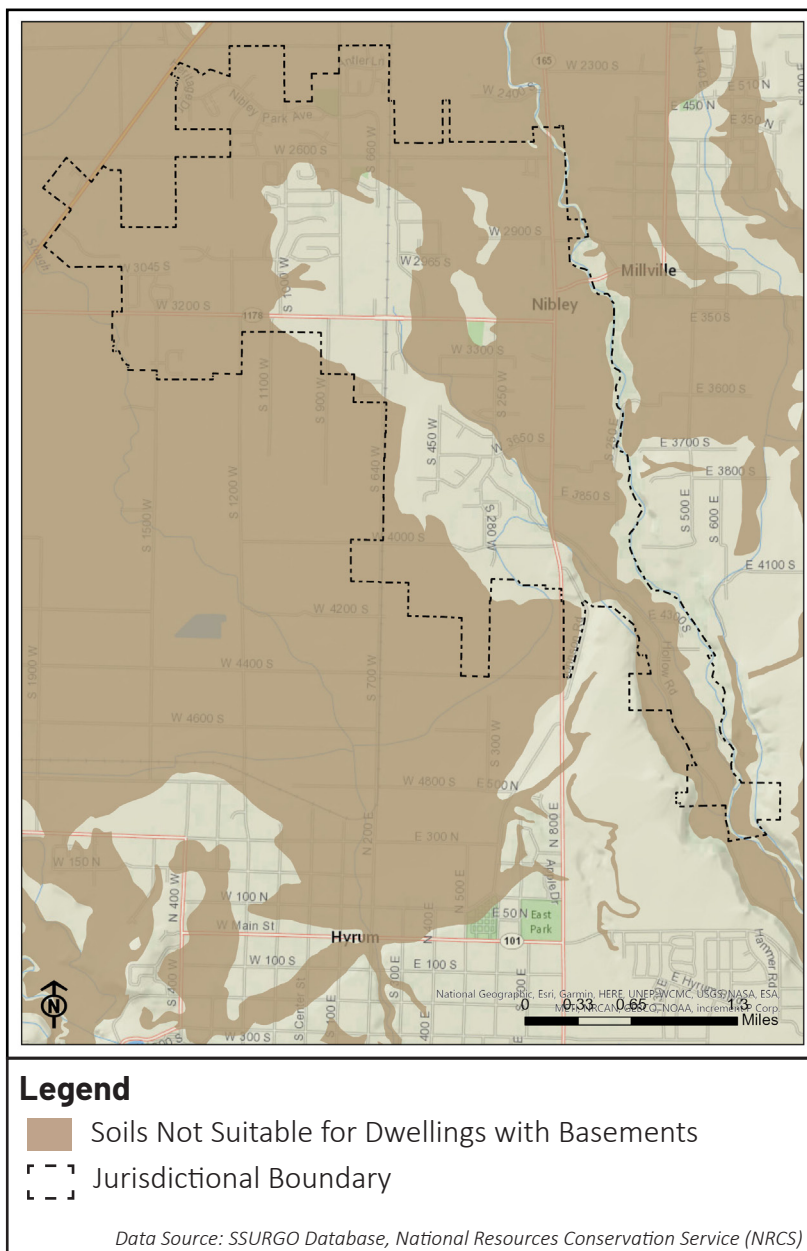
- Collapsible soil: Soils that have considerable strength when in a dry, natural state, but significantly settle due to hydrocompaction (reduction of air space within the soil) when wetted;
- Expansive soil: Soil with high clay content that swells when wet and shrinks when dried; and
- Subsidence : Sinking of the ground caused by groundwater depletion and/or underground mine subsidence or collapse

Problem soils can cause extensive damage to structures and foundations, and may also damage pavements after construction. They have caused an undetermined, but very significant amount of infrastructure damage and resulting economic impact.

Map Description: This map displays soils not suitable for dwellings with basements based on soil parameters (see reference section USDA SSURGO 1. Soils Not Suitable for Dwellings with Basements for more information).

RISK:

Much of Nibley City is covered by soils that could prove problematic to buildings and some infrastructure. However, very little damage has been seen to structures and infrastructure built on problematic soils in the Bear River Region in recent years, especially those that are in compliance with national and international building codes. The vast majority of the local governments in the State of Utah are utilizing one of these codes, which mitigates most impacts from these soils. It should be noted, however, that if structures or infrastructure are built on problematic soils that are also on steep slopes, previous landslides, saturated soils, or on other questionable areas, extensive damage may result.



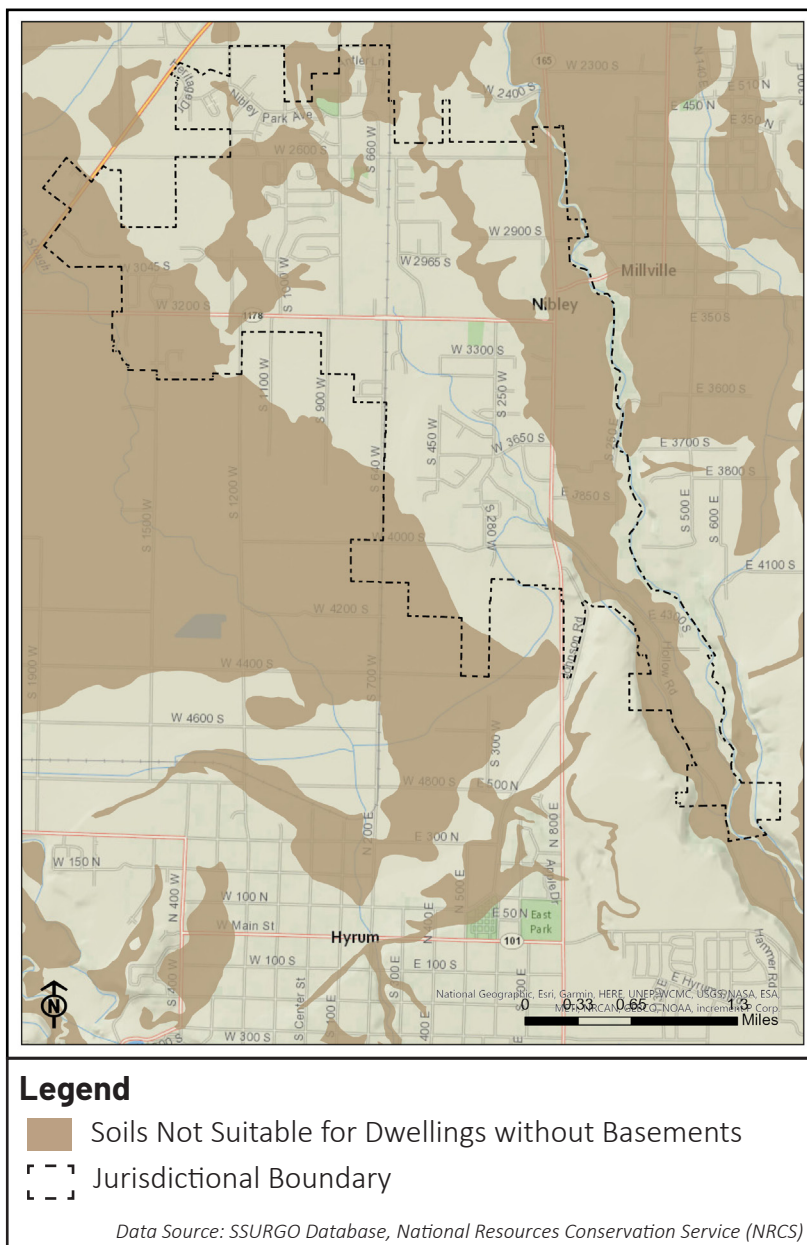
Problem Soils (without basements)

Hazard Description: Problem soils are a group of hazards related to the specific properties of soils, and can include:

- Collapsible soil: Soils that have considerable strength when in a dry, natural state, but significantly settle due to hydrocompaction (reduction of air space within the soil) when wetted;
- Expansive soil: Soil with high clay content that swells when wet and shrinks when dried; and
- Subsidence : Sinking of the ground caused by groundwater depletion and/or underground mine subsidence or collapse

Problem soils can cause extensive damage to structures and foundations, and may also damage pavements after construction. They have caused an undetermined, but very significant amount of infrastructure damage and resulting economic impact.

Map Description: This map displays soils not suitable for dwellings without basements based on soil parameters (see reference section USDA SSURGO 2. Soils Not Suitable for Dwellings without Basements for more information).



Wildfire - Utah FFSL

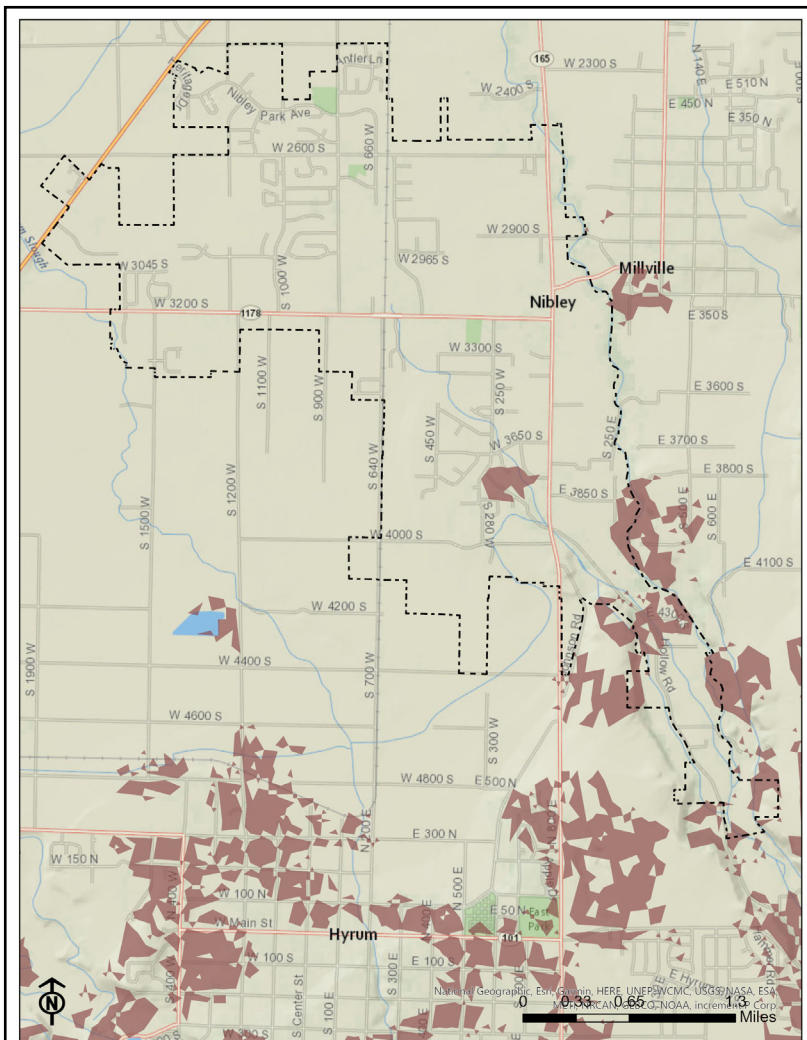
Hazard Description: A wildfire is any outdoor fire that is not controlled, supervised, or arranged. Wildfire probability depends on fuel, weather and topography. Wildfires can occur in the wildland or the wildland urban interface. A wildland is an area where development is almost nonexistent, except for roads, railroads, or power lines. Wildland urban interface is an area where structures and other human development meet or intermingle with wildland or vegetation fuels.

Fuels are anything that will burn and include vegetation and structures. The weather, such as high temperatures, low humidity and high winds increase the likelihood that a wildfire will spread. Topography affects speed at which a wildfire will spread. A fire will move more quickly uphill which causes hot gases to rise in front of it. These gases in turn, pre-heat and dry vegetation ahead of the wildfire causing it to catch fire more rapidly.

Hazard Description: This map displays areas of moderate to high wildfire threat developed by the Utah Division of Forestry, Fire and State Lands and historical wildfire occurrences from 1980-2016. For more information visit: <https://wildfirerisk.utah.gov/>

RISK:

Wildfire risk in Nibley mostly consists of the heavily vegetated areas along the Blacksmith Fork River and hillsides on the east side of town. Potential losses include 36 homes, 0.6 miles of roads, 0.9 miles of canals, 72.6 acres of groundwater protection areas, and 45.6 acres of local farmland.



Legend

- Moderate to High Wildfire Threat
- Jurisdictional Boundary

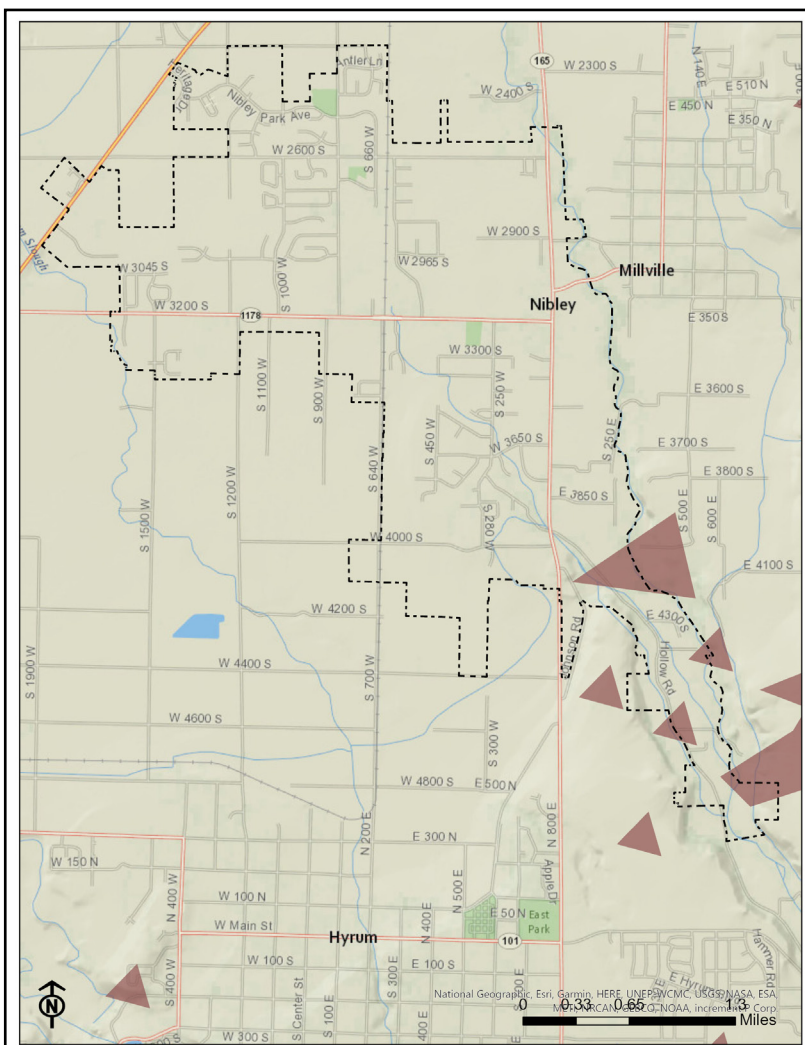
Data Source: Utah Division of Forestry, Fire & State Lands; US Geological Survey (2017)

Wildfire - US Forest Service

Hazard Description: A wildfire is any outdoor fire that is not controlled, supervised, or arranged. Wildfire probability depends on fuel, weather and topography. Wildfires can occur in the wildland or the wildland urban interface. A wildland is an area where development is almost nonexistent, except for roads, railroads, or power lines. Wildland urban interface is an area where structures and other human development meet or intermingle with wildland or vegetation fuels.

Fuels are anything that will burn and include vegetation and structures. The weather, such as high temperatures, low humidity and high winds increase the likelihood that a wildfire will spread. Topography affects speed at which a wildfire will spread. A fire will move more quickly uphill which causes hot gases to rise in front of it. These gases in turn, pre-heat and dry vegetation ahead of the wildfire causing it to catch fire more rapidly.

Hazard Description: This map displays areas of moderate to high wildfire hazard potential developed by the U.S. Forest Service and historical wildfire occurrences from 1980-2016. For more information visit: <https://www.firelab.org/project/wildfire-hazard-potential>



Legend

- Moderate to High Wildfire Threat
- Jurisdictional Boundary

Data Source: Dillon, G.K., Menakis, J., and Fay, F. (2015); US Geologic Survey (2017)

NIBLEY - COMMUNITY MITIGATION STRATEGIES								
Protecting <u>Current</u> Residents and Property								
Hazard	Action	How is action NFIP compliant?	Priority (High, Medium, Low)	Time-frame (Year)	Potential Funding Sources	Responsible Entity	Estimated Cost	Resources
Flood	Address deficiencies in current stormwater system including Meadow View and 1350 West ponds and drainage channels through up-sizing culverts and drainages, and other expansion elements.	Protects current homes	High	2021	FEMA, Utah DEM	City Public Works	TBD	FEMA, Utah DEM, BRAG
Landslide	Explore possibility of doing a landslide risk study for east section of city near the Blacksmith Fork River	NA	High	2021	Army Corps of Engineers, UGS, Local	City Planner	TBD	ACOE, UGS, BRAG
Liquefaction/Steep Slope	Consider commissioning study providing updated data in Nibley City.	NA	Medium	2023	UGS, USGS	City Planner	TBD	UGS, USGS
Problem Soil	Hold an educational event on potential impacts from expandable and collapsible soils.	NA	Low	2025	UGS, Utah DEM	City Planner	Minimal	UGS, Utah DEM, BRAG
Wildfire	Follow recommendations in local CWPP. Work with UDWR, Utah FFSL, and county on fire break/fuel load reduction east of town - review and update current conditions as needed.	NA	High	2021	Utah FFSL, UDWR, County, Local	City Fire	TBD	Utah FFSL, Utah DEM, UDWR, Hyrum Fire Dept.
Severe weather	Back-up generators for City Hall, Public Works bldg, 2 city wells, and 3 lift stations.	NA	High	2021	FEMA, Utah DEM, local	City Public Works	~\$1 Million	FEMA, Utah DEM, BRAG
NIBLEY - COMMUNITY MITIGATION STRATEGIES								
Protecting <u>Future</u> Residents and Property								
Hazard	Action	How is action NFIP compliant?	Priority (High, Medium, Low)	Time-frame (Year)	Potential Funding Sources	Responsible Entity	Estimated Cost	Resources
Flood	Assess existing 2011 floodplain ordinance and see where deficiencies exist, if any. Work with Utah DEM to update if/when necessary.	Protects current and future homes	Medium	2022	Local, FEMA	City Planner	Minimal	FEMA, Utah DEM, BRAG
Landslide	Explore possibility of implementing a geologic hazards ordinance - work with UGS to customize.	NA	High	2021	UGS, Utah DEM, local	City Planner	Minimal	UGS, BRAG, Utah DEM
Liquefaction/Steep Slope/Problem soil	Explore possibility of implementing a geologic hazards ordinance - work with UGS to customize.	NA	High	2021	UGS, USGS, city	City Planner	Minimal	UGS, Utah DEM, BRAG

RESOLUTION 21-04

APPOINTMENT TO THE NIBLEY CITY PLANNING COMMISSION

WHEREAS, Nibley City code 3.02.010 establishes a creates a planning commission of five (5) members, and one alternate. The Mayor, with advice and consent of the City Council, shall appoint all members and alternates to the Planning Commission; and

WHEREAS, it has become necessary for Mayor Dustin to appoint a new representative to the Nibley City Planning Commission to serve as an alternate member.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF NIBLEY CITY, STATE OF UTAH, AS FOLLOWS:

1. Ryan Werner is hereby appointed to serve as a Nibley City Planning Commissioner Alternate to serve for a term of five (5) years, ending the first Monday in February, 2026.

PASSED BY THE NIBLEY CITY COUNCIL THIS 28 DAY OF JANUARY, 2021.

Shaun Dustin, Mayor

ATTEST: _____
David Zook, City Recorder

CERTIFICATE OF APPOINTMENT

State of Utah}
County of Cache}
City of Nibley}

Be it ordained by the Nibley City Council that **Ryan Werner** has been appointed by the Nibley City Council to be an alternate to the Nibley City Planning Commission, to serve for a term of five (5) years, ending February, 2026.

Subscribed and sworn before me this _____th day of _____ 2021.

Shaun Dustin, Mayor

David Zook, Recorder

#7 Department Report

Description	Fitness/Recreation
Department	Recreation
Presenter	Chad Wright
Recommendation	Receive the report. Provide comments. Ask questions.
Reviewed By	City Manager

Background:

Department staff provide periodic reports to the City Council to provide updates on initiatives and projects. The Recreation Director will provide an update on recreation and fitness operations.

Agenda Item #8

Description	Public Hearing – Ordinance 21-01 (formally 20-17): Amendments to the Nuisance Ordinance
Department	Planning
Presenter	Levi Roberts, Planner
Recommendation	Hold the public hearing to receive public comment regarding Ordinance 21-01: Amendment to the Nuisance Ordinance, for first reading.
Reviewed By	Mayor, City Manager, Public Works Director

Background:

Nibley City's nuisance ordinance provides a mechanism to address conditions on private property which are dangerous, noxious or unsightly. This ordinance is in need of revision to incorporate recent revisions to State code, address discrepancies and contradictions, and to adjust the appeal procedures. The recommended changes include the following general provisions:

1. Reduce the penalty for a declared nuisance from a Class C misdemeanor to an infraction to be consistent with Utah Code 10-3-703(1)(b), (4). The City could charge an offender with a misdemeanor if the nuisance affects health/safety or the city has fined the person 3 times over the past 12 months (but no more than 1 time per 2 weeks).
2. Change the appeal authority from the City Council to the administrative appeals officer. Staff believes that due to the quasi-judicial nature of appeals, the appeals officer would be a more appropriate appeal authority. This person is already trained to address land use appeals. Appeals regarding nuisances could be addressed in a similar fashion as land use appeals.
3. Adjust some of the timeframes for compliance and appeals. Some of the set timeframes seem unreasonable and staff recommends adjusting them. For example, the code stipulates that appeals must be heard within 5 days from notice of hearing.
4. Consolidate the definitions and examples for what constitutes a nuisance. Currently, the code includes 2 definitions for a nuisance with examples of what constitutes a nuisance in various sections. This becomes difficult for the code

enforcement officer to administer. Consolidating definitions will clarify the code and make it easier for City Staff and the General Public to interpret. In addition, Staff is recommending to add some new descriptions of a nuisance, including maintenance of property and vehicles parked in front lawn areas.

ORDINANCE 21-01
AMENDMENTS TO NIBLEY CITY CODE 7.02; NUISANCES

WHEREAS, Nibley City regulates nuisances within Nibley City boundaries; and

WHEREAS, Nibley City is concerned with ensuring conditions within the City are not deleterious, injurious, noxious or unsightly.

WHEREAS, Utah Code provides limits for violations related to nuisance violations on private property.

WHEREAS, improving the clarity of the nuisance ordinance is anticipated to improve its effectiveness.

NOW, THEREFORE, BE IT ORDAINED BY THE NIBLEY CITY COUNCIL OF NIBLEY, UTAH THAT:

1. The proposed amendments to NCC 7.02 be adopted.
2. All ordinances, resolutions, and policies of the City, or parts thereof, inconsistent herewith, are hereby repealed, but only to the extent of such inconsistency. This repealer shall not be construed as reviving any law, order, resolution, or ordinance, or part thereof.
3. Should any provision, clause, or paragraph of this ordinance or the application thereof to any person or circumstance be declared by a court of competent jurisdiction to be invalid, in whole or in part, such invalidity shall not affect the other provisions or applications of this ordinance or the Nibley City Municipal Code to which these amendments apply. The valid part of any provision, clause, or paragraph of this ordinance shall be given independence from the invalid provisions or applications, and to this end the parts, sections, and subsections of this ordinance, together with the regulations contained therein, are hereby declared to be severable.
4. This ordinance shall become effective upon posting as required by law.

PASSED BY THE NIBLEY CITY COUNCIL THIS _____ DAY OF _____, 2021.

Shaun Dustin, Mayor

ATTEST: _____
David Zook, City Recorder

7.02 Nuisances

[7.02.010 Definitions](#)

[7.02.020 Declaration Of Nuisance](#)

[7.02.030 Restroom Or Sewer Facilities](#)

[7.02.040 Restrictions On Blocking Water](#)

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[7.02.070 Penalty For Failure To Comply](#)

7.02.010 Definitions

As used in this chapter, the following words and terms shall have the meanings ascribed to them in this section:

AUTHOR: Where a nuisance exists upon property and is the outgrowth of the usual, natural or necessary use of the property, the landlord or his agent, the tenant or his agent, and all other persons having control of the property on which such nuisance exists, shall be deemed to be the authors thereof and shall be equally liable and responsible. Where any such nuisance shall arise from the unusual or unnecessary use of such property or from the business thereon conducted, then the occupants and all other persons contributing to the continuance of such nuisance shall be deemed the authors.

NUISANCE: Whatever is dangerous to human life or health, deleterious, injurious, noxious, unsightly and whatever renders soil, air, water or food impure or unwholesome, which includes but is not limited to conditions described in this chapter.

HISTORY

Adopted by Ord. 1977 Code Code §§ 10-311, 10-312 on 1/1/1977

Amended by Ord. 2002 Code on 1/1/2002

7.02.020 Declaration Of Nuisance

Statement: Every act or condition made, permitted, allowed or continued in violation of NCC 7.02.010, is hereby declared to be a nuisance and may be abated and punished as hereinafter provided. No person owning, leasing, occupying or having charge of any premises shall maintain or keep any nuisance thereon, nor shall any such person keep or maintain such premises in any manner causing substantial diminution in the value of the other property in the neighborhood in which such premises are located.

Specified: Nuisances include, but are not limited to:

Befouling Water: Befouling water in any spring, stream, well or water source supplying water for culinary purposes.

Privies, Cesspools: Allowing any privy vault or cesspool, or other individual wastewater disposal system, to become a menace to health or a source of odor or contamination to air or water.

Deleted: [7.02.050 Nuisances On Property](#)

Commented [1]: (2) Definitions for Nuisance in same chapter; Section 7.02.010 & 7.02.050

Deleted: any condition or use of premises or of building exteriors which are deleterious or injurious, noxious or unsightly, which includes, but is not limited to, keeping or depositing on or scattering over the premises any of the following:

<#>Lumber, junk, trash or debris.

Abandoned, discarded or unused objects or equipment such as automobiles, furniture, stoves, refrigerators, freezers, cans, containers or other discarded items not currently in use is declared to be a nuisance and unlawful. It shall be unlawful for any person either as an owner, agent or occupant to create or aid in creating or contributing to or maintaining a nuisance.

Commented [2]: Add Section 7.02.50(B)(C)(D) Nuisances on Property; Consolidate

Garbage Containers, ~~Permitting any garbage container that has become unclean and offensive, to remain on premises without disposal, for a period of no longer than fourteen (14) days.~~

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Garbage Accumulation: Allowing ~~garbage, litter, filth or refuse of any nature to accumulate within or upon any private alley, yard or area, except when it is temporarily deposited for immediate removal or being composted.~~

Deleted: when it has become unclean and offensive

Deleted: vegetable waste

~~Unsheltered Storage of Personal Property: The keeping, depositing and scattering over the premises any objects or equipment, which are not sheltered within a building or canopy. Exceptions include home decor, outdoor furniture, garbage containers and temporary placement of items for sale or disposal.~~

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~~Parked vehicles in front yard: Parking of vehicles, trailers or recreational vehicles in the front yard area outside of a driveway and unsheltered.~~

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~~Inoperable vehicles & machinery: Unsheltered storage of old, unused, stripped and junked machinery, vehicles, implements, equipment which is no longer safely usable for the purposes for which it was manufactured, for a period of thirty (30) days or more (except in licensed junkyards) within the city. Any unregistered passenger vehicle shall be considered unused.~~

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Manure Accumulation: Permitting the accumulation of manure in any stable, stall, corral, feed yard, yard or in any other building or area in which any animals are kept.

Slaughterhouses, Feed Yards: Permitting any slaughterhouse, market, meat shop, stable, feed yard or other place or building wherein any animals are slaughtered, kept, fed or sold to remain unclean or in any state or condition detrimental to health or creating a nuisance because of odors, or in which flies or rodents breed.

Discharging Offensive Water Or Liquid Waste: Discharging or placing any offensive water, chemical spray, liquid waste or refuse of any kind into any street, alley, sidewalk, gutter, stream, wash, natural watercourse, ditch, canal or any vacant lot or which, as the result of continued discharge, will render the place of discharge offensive or likely to become so.

Collecting Grease, Offensive Matter: Keeping or collecting any stale or putrid grease or other offensive matter.

Flies And Mosquitoes: Having or permitting upon any premises any fly- or mosquito-producing condition.

Public Drinking Vessels: Keeping any drinking vessel for public use without providing a method of decontamination between uses.

Ablutions Near Drinking Fountain: Permitting or performing any ablutions in or near any public drinking fountain.

Boarding House Or Factory, Sanitary Condition: Failing to furnish any dwelling house, boarding house or factory or other place of employment with such privy vaults, water closets, sinks or other facilities as may be required to maintain the same in sanitary condition.

Cleaning Privy Vaults: Neglecting or refusing to discontinue use of, clean out, disinfect and fill up all privy vaults and cesspools or other individual ~~wastewater~~ disposal systems within twenty (20) days after notice from an enforcement officer or official of the city.

Deleted: waste water

Stagnant Water; Offensive Substances: Permitting any lot or excavation to become the repository of stagnant water or any decaying or offensive substances.

Obstructing Public Ways, Watercourses, Parks: Obstructing or tending to obstruct or interfere with or render dangerous for passage any street or sidewalks, lake, stream, drainage, canal or basin, utility line or connection, utility easement, or any public park without first obtaining the written permission of the city council.

Dead or Diseased Trees: Any dead or diseased trees which constitute a hazard to life and property, or harbor insects or disease which constitute a potential threat to other trees within the city.

Unmaintained Structures: Structures which have a foundation, exterior wall, and/or roof not maintained in good repair, thus not allowing all rooms and other interior areas to be weathertight, watertight, and rodentproof and be maintained in good condition. This includes broken windows and surfaces which are not painted, stained, or constructed of decay-resistant materials to protect and preserve the safety and appearance of the structure.

Enumeration: The types of nuisances above stated shall be deemed in addition to and in no way a limitation of the nuisances subject to this chapter.

HISTORY

Adopted by Ord. 1977 Code Code §§ 10-313, 10-314 on 1/1/1977

Amended by Ord. 2002 Code on 1/1/2002

7.02.030 Restroom Or Sewer Facilities

All restrooms or sewer facilities shall be constructed and maintained in accordance with Utah law and city ordinances. All such facilities that do not comply with such provisions are hereby declared to be a nuisance and are subject to abatement as herein prescribed.

HISTORY

Adopted by Ord. 1977 Code Code § 10-315 on 1/1/1977

Amended by Ord. 2002 Code on 1/1/2002

7.02.040 Restrictions On Blocking Water

It shall be unlawful for any person to permit any drainage system, canal, ditch, conduit or other watercourse of any kind or nature, natural or artificial, to become so obstructed as to cause the water to back up and overflow therefrom, or to become unsanitary.

Maintenance of any such watercourse in such condition shall constitute a nuisance and the same shall be subject to abatement.

HISTORY

Adopted by Ord. 1977 Code Code § 10-316 on 1/1/1977

HISTORY

Adopted by Ord. 1977 Code §§ 10-331, 10-332, 10-333, 10-334 on 1/1/1977

Amended by Ord. 2002 Code on 1/1/2002

7.02.060 Abatement Procedure

Code Enforcement Officer:

Established: There is hereby established the position of code enforcement officer, whose duties it shall be to enforce the provisions of this chapter. Until a code enforcement officer is designated, the city manager, or designee, or the city's law enforcement agency shall enforce the provisions of this chapter.

Duties: The code enforcement officer, or the city's law enforcement agency is authorized to:

Perform all functions necessary to enforce the provisions of this chapter.

Inspect or cause to be inspected, as often as needed, all buildings, structures, lots or places for the purpose of determining whether such are in compliance with the provisions of this chapter.

Existence Of Objectional Condition: If the code enforcement officer or city's law enforcement agency concludes there exists an objectionable condition in violation of this chapter, the code enforcement officer, or the city's law enforcement agency shall:

Ascertain the names of the owners and occupants and descriptions of the premises where such objects and/or conditions constituting a nuisance exist.

Serve notice in writing upon the owner and occupant of such premises, either personally or by mailing notice prepaid, addressed to the owner and occupant at their last known post office addresses as disclosed by the records of the county assessor, or as otherwise ascertained, requiring such owner or occupant, or both, as the case may be, to eradicate or destroy and remove the nuisance within such time as the code enforcement officer, or the city's law enforcement agency may designate; provided, that any person notified pursuant to this subsection shall be given at least ten (10), but not more than thirty (30) days, as determined by the code enforcement officer, or the city's law enforcement agency following the date of service of such notice, to correct the objectionable condition. The notice shall:

Contain a specific statement of the nature of the violation and generally describe the premises on which the violation exists.

Inform the owner, occupant or other person that in the event he/she disagrees with the determination of the code enforcement officer, or the city's law enforcement agency and does not wish to comply with the provisions of the notice or that he/she objects to the factual or legal basis

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~~<#>~~Lumber, junk, trash or debris.

~~<#>~~Abandoned, discarded or unused objects or equipment such as automobiles, furniture, stoves, refrigerators, freezers, cans, containers or other discarded items not currently in use.

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Storage Of Personal Property: Unsheltered storage of old, unused, stripped and junked machinery, implements, equipment or personal property of any kind which is no longer safely usable for the purposes for which it was manufactured, for a period of thirty (30) days or more (except in licensed junkyards) within the city, is hereby declared to be a nuisance and dangerous to the public safety.

Abatement By Owners: The owner, owners, tenants, lessees or occupants of any lot within the city on which

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for the notice, he/she may request, in writing, an informal hearing before the administrative appeal officer. A written application for a hearing shall stay the time within which the person must conform to the provisions of the notice.

Inform the person that in the event he fails or neglects to correct the objectionable condition, the city will correct the objectionable condition and will collect the costs of so correcting the objectionable condition by either a court action, in which case he will be assessed such costs, together with reasonable attorney fees and court costs, or will charge the cost of correcting the violation against the property as a tax.

In the event the owner or occupant makes such request for a hearing, the administrative appeal officer shall set the time and place for hearing objections and the city recorder shall notify the owner, occupant or other persons having an interest in said property on the condition thereof, in writing, of the time and place at which they may appear and be heard. The hearing shall be heard within less than twenty (20) days from the date of service or mailing of the notice of hearing.

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Hearing:

Informal Hearing; Written Decision: At the written request of an owner, occupant or other person having an interest in property which is the subject of a notice to remove or abate weeds, objectionable conditions or objects from the property, the administrative appeal officer shall conduct an informal hearing, wherein such persons may present such evidence and argument as is pertinent to the question of whether or not the removal or abatement of the objects or conditions is properly within the purview of this chapter. The administrative appeal officer shall also permit the presentation of evidence and argument by the code enforcement officer or the city's law enforcement agency and other interested parties. Thereafter, the administrative appeal officer shall render its written decision, a copy of which shall be mailed to or served upon the owner or any other person to whom the original notice was given by the city's law enforcement agency.

Notice Of Decision; Abatement By Owner Or Occupant: In the event the decision of the administrative appeal officer upholds the determination of the code enforcement officer or the city's law enforcement agency, the notice originally given by the code enforcement officer or the city's law enforcement agency as above provided shall be deemed to be sufficient to require the owner or occupant to remove or abate the objectionable objects or conditions, and he shall have up to ten (10) days from the date of notice of the decision within which to conform thereto, unless additional time, not to exceed thirty (30) days, is authorized by the code enforcement officer or the city's law enforcement agency.

Time Period For Compliance: In the event that the decision of the administrative appeal officer either overrules or modifies the determination of the code enforcement officer or the city's law enforcement agency, the written decision of the administrative appeal officer shall apprise the owner or occupant of that fact and set forth the details and extent to which the owner or occupant must make removal or other abatement of the objectionable objects or conditions, if any. The owner or occupant shall be required to

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conform to the decision, within ten (10) days after service or mailing of a copy of the decision.

Filing Of Amended Notice: The code enforcement officer, or the city's law enforcement agency shall file an amended notice and proof of service of notice and file the same in the office of the county treasurer.

Failure To Comply; Abatement By City: If any owner, occupant or other person having an interest in land described in such notice or decision to whom the notice was given shall fail or neglect to conform to the requirements thereof relating to the abatement of the nuisance, the code enforcement officer, or the city's law enforcement agency may employ all necessary assistance to cause such objectionable objects or conditions to be removed or destroyed at the expense of the city.

Itemized Statement: The code enforcement officer, or the city's law enforcement agency shall prepare an itemized statement of all expenses incurred in the abatement of nuisances, including administrative, personnel, and legal costs, and shall mail a copy thereof to the owner or occupant or both or to persons having an interest in the property, demanding payment within twenty (20) days of the date of mailing. The notice shall be deemed delivered when mailed by registered mail, addressed to the property on which the nuisance exists, the address of record with county land records for the owner or the property, or last known address of the property owner, occupant or persons having an interest in the property if different from the above.

Failure To Make Payment: In the event the owner, occupant or person having an interest in the property fails to make payment of the amount set forth in the statement to the city treasurer within the twenty (20) days, the code enforcement officer, or the city's law enforcement agency may either cause suit to be brought in an appropriate court of law or may refer the matter to the county treasurer as provided in this chapter.

Collection:

Lawsuit: In the event collection of expenses of destruction and removal are pursued through the courts, the city shall sue and receive judgment for all of said expenses of destruction and removal, together with reasonable attorney fees, interest and court costs, and shall execute upon such judgment in the manner provided by law. The city may also assign its right to enforce and collect such expenses to a collection agency or other entity for collection, which entity shall have the same right to collect as if they were the city.

Taxes: In the event that the building inspector or the city's law enforcement agency elects to refer the expenses of destruction or removal to the county treasurer for inclusion in the tax notice of the property owner, he shall make in triplicate an itemized statement of all expenses incurred in the destruction and removal of the same, and shall deliver three (3) copies of the statement to the county treasurer within ten (10) days after the completion of the work of destroying or removing such weeds, refuse, garbage, objects or structures. Thereupon, the costs of the work shall be pursued by the county treasurer in accordance with the provisions of Utah Code § 10-11-4, as amended, and the recalcitrant owner shall have such rights and shall be subject to such powers as are thereby granted.

Criminal Proceedings: The commencement of criminal proceedings for the purpose of imposing penalties for violations of this chapter shall not be conditioned upon prior issuance of a notice or the granting to the defendant an opportunity to abate or remove the nuisance. The provisions of

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this chapter relating to notice and abatement shall be deemed merely alternative and additional methods of securing conformity to the provisions of this chapter.

HISTORY

Adopted by Ord. 1977 Code §§10-351, 10-352, 10-353, 10-354, 10-355, 10-356, 10-357, 10-358 on 1/1/1977

Amended by Ord. 2002 Code on 1/1/2002

7.02.070 Penalty For Failure To Comply

Infraction: Any owner, occupant or person having an interest in property subject to this chapter who shall fail to comply with the notice or order given pursuant to this chapter shall be guilty of an infraction and, upon conviction thereof, subject to penalty as provided in NCC 1.08.010 for each offense, and further sum of ten dollars (\$10.00) for each and every day such person fails to comply beyond the date fixed for compliance. For nuisances related to an individual's use of the individual's residence, the individual shall be subject to prosecution for each 14-day time period the violation continues, each of which periods shall be considered a separate violation. For all other nuisances, each day shall be considered a separate violation.▲

Class C Misdemeanor: Any owner, occupant or person having an interest in property subject to this chapter who shall fail to comply with the notice or order given pursuant to this chapter may be charged with a class C misdemeanor if the nuisance threatens the health, safety, or welfare of the individual or an identifiable third party or the individual has been convicted of a violation of this chapter on three previous occasions within the past 12 months.

Criminal Proceedings: Compliance by any owner, occupant or person to whom a notice has been given subsequent to the commencement of criminal proceedings as provided in this chapter shall not be admissible in any criminal proceeding brought pursuant to this section.▲

Commented [RP5]: Possible escalation provision in accordance with 10-3-703. Don't need it, but I thought I'd give it as a suggestion for the city to consider.

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Agenda Item #9

Description	Public Hearing – Ordinance 21-02 (formally 20-20): Establishing a Time Limit and Deposit to Install Landscaping for New Construction
Department	Planning
Presenter	Levi Roberts, Planner
Recommendation	Hold the public hearing to receive public comment regarding Ordinance 21-02: Establishing a Time Limit and Deposit to Install Landscaping for New Construction
Reviewed By	Mayor, City Manager, Public Works Director

Background:

Updated for January 28

During the first reading for this ordinance, a motion was passed to add the following sentence:

The deposit shall be returned to the owner of the property at the time that the determination had been made that the required improvements are in place.

The City Attorney has reviewed this change and determined that requiring the applicant to forfeit the deposit to whomever the owner is would be illegal without consent of the applicant. Therefore, staff recommends changing this sentence to read as follows:

The deposit shall be returned to the applicant or applicant's designee.

This would still allow the deposit to be returned to the owner, but only if the applicant designates them to receive it.

One of the Planning Commission Goals for 2020 is to review landscaping requirements for residential and commercial developments. NCC 19.24.170 provides landscaping

requirements for residential, commercial and industrial zones, including the provision that 60% of a front or side yard adjacent to a street must be landscaped. Although these requirements are in code, in many cases there is not a sufficient process in place to ensure that landscaping is installed in a timely manner with new development. The City currently does not require landscaping to be installed prior to issuing a certificate of occupancy. This would not be appropriate, as homes are completed at various times of year, which are not necessarily feasible times to plant.

In order to ensure landscaping is appropriately installed, the following provisions are recommended to be incorporated into Nibley City Code:

- Requiring landscaping to be completed within 18 months of occupancy.
- Requiring a landscaping deposit for building permits, which would be refunded upon completion of landscaping.

The City currently requires a \$1,000 deposit for building site clean-up and damage repair (Resolution 03-11). Staff recommends adding an additional \$1,000 to this deposit for each residential unit. For commercial and industrial development, it is recommended that a deposit of \$1,000 per total acreage be applied at the time of building permit issuance. Staff has determined that this amount is proportionate to the minimum required cost of improvements and is a reasonable incentive to complete such improvements. The actual deposit amount will need to be incorporated into the City's consolidated fee schedule to be approved by the City Council.

Recommended Findings

- In order to effectively ensure compliance with landscaping requirements of Nibley City Code and Design Standards, a completion deadline and deposit is needed.
- City Council should establish the deposit amount of \$1,000 for residential development and \$1,000 per acre for commercial/industrial development, in addition to the already established \$1,000 deposit for building site clean-up and damage repair

Planning Commission Recommendation

The Planning Commission moved to recommend approval of Ordinance 20-20: Establishing a Time Limit and Deposit to Install Landscaping for New Construction. There was brief discussion if \$1,000 was enough of an incentive. The Planning Commission decided to watch how well \$1,000 would motivate the public knowing that the fee could be changed later in Nibley City's Consolidated Fee Schedule. The motion passed unanimously with all five Planning Commissioners in favor.

ORDINANCE 21-02
ESTABLISHING A TIME LIMIT AND DEPOSIT TO INSTALL LANDSCAPING FOR NEW
CONSTRUCTION

WHEREAS, Nibley City regulates the provision of landscaping within Nibley City boundaries to encourage pleasant and attractive conditions and abate impacts related to heat, noise, glare and erosions; and

WHEREAS, to effectively incentivize the installation of required landscaping, a time limit and appropriate deposit is necessary.

NOW, THEREFORE, BE IT ORDAINED BY THE NIBLEY CITY COUNCIL OF NIBLEY, UTAH THAT:

1. The proposed amendments to NCC 19.24.170 be adopted.
2. The initial landscaping deposit shall be set at \$1,000 for each residential dwelling unit and \$1,000/acre for commercial, industrial, and institutional development. This amount may be adjusted by resolution from time to time.
3. All ordinances, resolutions, and policies of the City, or parts thereof, inconsistent herewith, are hereby repealed, but only to the extent of such inconsistency. This repealer shall not be construed as reviving any law, order, resolution, or ordinance, or part thereof.
4. Should any provision, clause, or paragraph of this ordinance or the application thereof to any person or circumstance be declared by a court of competent jurisdiction to be invalid, in whole or in part, such invalidity shall not affect the other provisions or applications of this ordinance or the Nibley City Municipal Code to which these amendments apply. The valid part of any provision, clause, or paragraph of this ordinance shall be given independence from the invalid provisions or applications, and to this end the parts, sections, and subsections of this ordinance, together with the regulations contained therein, are hereby declared to be severable.
5. This ordinance shall become effective upon posting as required by law.

PASSED BY THE NIBLEY CITY COUNCIL THIS _____ DAY OF _____, 2021.

Shaun Dustin, Mayor

ATTEST: _____
David Zook, City Recorder

19.24.170 Landscaping

1. Landscaping Requirements:

1. Purpose: The purpose of the landscaping requirements in this section shall be to enhance, conserve and stabilize property values by encouraging pleasant and attractive surroundings and thus create the necessary atmosphere for the orderly development of a pleasant community. Landscaping also contributes to the relief of heat, noise and glare through the proper placement of green plants and trees.
2. Yard Requirements ~~for~~ Residential Zones: At least sixty percent (60%) of the area contained within a required front ~~and~~ side yard adjacent to a street in any residential zone shall be landscaped.
3. Scope ~~of~~ Requirements: Where landscaping is required, such landscaping shall comply with the requirements set forth in this section for the specific use and location.
4. Maintenance: Required landscaped areas shall be maintained in a neat, clean, orderly and healthful condition.
5. Completion: All required landscaping on both private property and public rights of way is required to be installed within eighteen (18) months of receiving certificate of occupancy for all new construction. A landscaping deposit assessed at the time of building permit issuance shall be withheld until the building inspector or designee determines that such improvements have been completed according to Nibley City Code and Design Standards. The deposit shall be returned to the applicant or applicant's designee. If required landscaping improvements are not complete within eighteen (18) months of certificate of occupancy, the deposit shall be forfeited.

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Agenda Item #10

Description	Discussion & Consideration – Disposal of Real Property located at 1221 West 3200 South, and an Accompanying Right-of-Way Agreement with Dell Loy Hansen
Department	Administration
Presenter	David Zook, City Manager
Recommendation	Make a motion to approve the disposal of property and the agreement
Reviewed By	Mayor, City Manager, Public Works Director, City Attorney, City-Contracted Real Estate Agent

Background:

Staff have been working for some time on acquiring the Right-of-Way needed to complete the roundabout project on 1200 West and 3200 South and are very close to having completed that task. The project is on track to go to bid near the end of February, with the aim of a spring-time construction start date.

Dell Loy Hansen owns a piece of property north of 3200 South, between 3200 South and the Stonebridge subdivision, along the west side of 1200 West. In order to construct the roundabout and roadway north of 3200 South, the City needs to acquire 0.29 acres of that property. Dell Loy has agreed to trade the City the amount of property needed for the roadway, and an additional 0.13 acres along the northern property line (for a total of 0.43 acres), in exchange for 0.37 acres that is the remainder parcel of the Connie McMannus property the City purchased for this project. It would be difficult for the City to do anything with this remainder parcel other than landscaping. The 0.13 acres along Dell Loys northern property line is a 25 foot wide strip that could be used as a trail corridor, to tie into the trail system Malouf is planning, as well as a storm drainage corridor.

RIGHT OF WAY CONTRACT

Partial Acquisition and Easement

Project No:		Parcel No.(s):	
Project Location	3200 South & 1200 West Roundabout		
County of Property	CACHE	Tax ID / Sidwell No:	03-017-0016
Property Address:	Northwest corner of 3200 South 1200 West, Nibley, Utah 84321		
Owner / Grantor (s):	Dell Loy Hansen c/o Brent Skinner		
Owner's Address:	595 South Riverwoods Parkway, Suite 400, Logan, Utah 84321		
Owner's Home Phone		Owner's Work Phone	435-757-6154

IN CONSIDERATION of the foregoing and other consideration hereinafter set forth, it is mutually agreed by the parties as follows:

The Owner/Grantor hereby agrees to sell a portion of the property located at Northwest corner of 3200 South 1200 West, Nibley, Utah 84321, which portion is more particularly described on Exhibit A to Nibley City, a body corporate and politic of the State of Utah (hereinafter "City"), for Transportation Purposes for the amount of \$0.00

1. Upon signing this Right of Way contract, Owner consents to allow City to enter the Property and Easement Area in order to conduct any necessary testing (such as environmental or geotechnical), surveying, or other due diligence.
2. Owner shall leave the Property and Easement Area in the same condition as it was when this contract was signed. No work, improvement, or alteration will be done to the Property or Easement Area other than what is provided for in this Contract. Owner agrees to maintain the Property and the Easement Area until County takes possession. Owner agrees not to sell the Property or the Easement Area to anyone else, or to enter into any contract that will affect the use of the Property and the Easement Area when City takes possession.
3. Owner agrees to transfer the Property and Easement Area free of all debris and toxic materials (including paint or other household products).
4. Owner agrees to pay any and all taxes assessed against the Property to the date of closing. City agrees to pay all taxes assessed against the Property from and after the date of closing.
5. Owner understands that at Closing, at its discretion, City may pay the full amount of \$0.00 directly to Owner. **In that event, it is Owner's responsibility to understand and fulfill any obligations to lienholders, mortgagees, or others who may have an interest in the Property or the proceeds from its sale.** At the option of City the transaction may be handled through a title and escrow company selected by City and at City's expense, in which event at closing, the title company will disburse funds to lienholders, mortgagees or others having an interest in the Property, with the remainder of the purchase price paid to Owner.
6. "Transportation Purposes" means public use for street and road purposes, together with the right to use the same for water, sewer, gas, power, telephone and other public utilities and all those other uses that are ordinarily associated with streets or roads or vital to the public's health, safety and welfare.
7. Owner is aware that Utah Code Ann. § 78B-6-520.3 provides that in certain circumstances, the seller of property, which is being acquired for a particular public use, is entitled to receive an offer to repurchase the property at the same price that the seller received, before the property can be put to a different use. Grantor waives any right under Utah Code Ann. § 78B-6-520.3 that Grantor may have to repurchase the property being acquired herein.
8. Grantor agrees to sign the mylar plat prepared by CRS Engineers, from which exhibits A, B and C attached here to were extracted from, and that the plat shall be the governing document upon which property shall be transferred, and recorded with the Cache County Recorder by Nibley City.
9. Nibley City will construct the widening of 1200 West roadway, irrigation piping, curb, gutter and sidewalk and will transfer 15,928 square feet of the corner property currently owned by Nibley City to the property owner (Dell Loy Hansen). Also, a 20 foot perpetual utility and slope easement will be recorded along the frontage of said property being transferred from Nibley City to the property owner.
10. This Right of Way Contract contains the entire agreement between Owner and City and each party agrees that they are not relying on any representations or understandings not expressly set forth herein, and it shall be governed by the laws of the State of Utah. The undersigned represent and warrant that he/she/they have authority to sign on behalf of Owner. The value of these improvements is included in the Total Settlement.

Total Settlement \$0.00

Owner's Initials _____

Owner/Grantor

Date _____

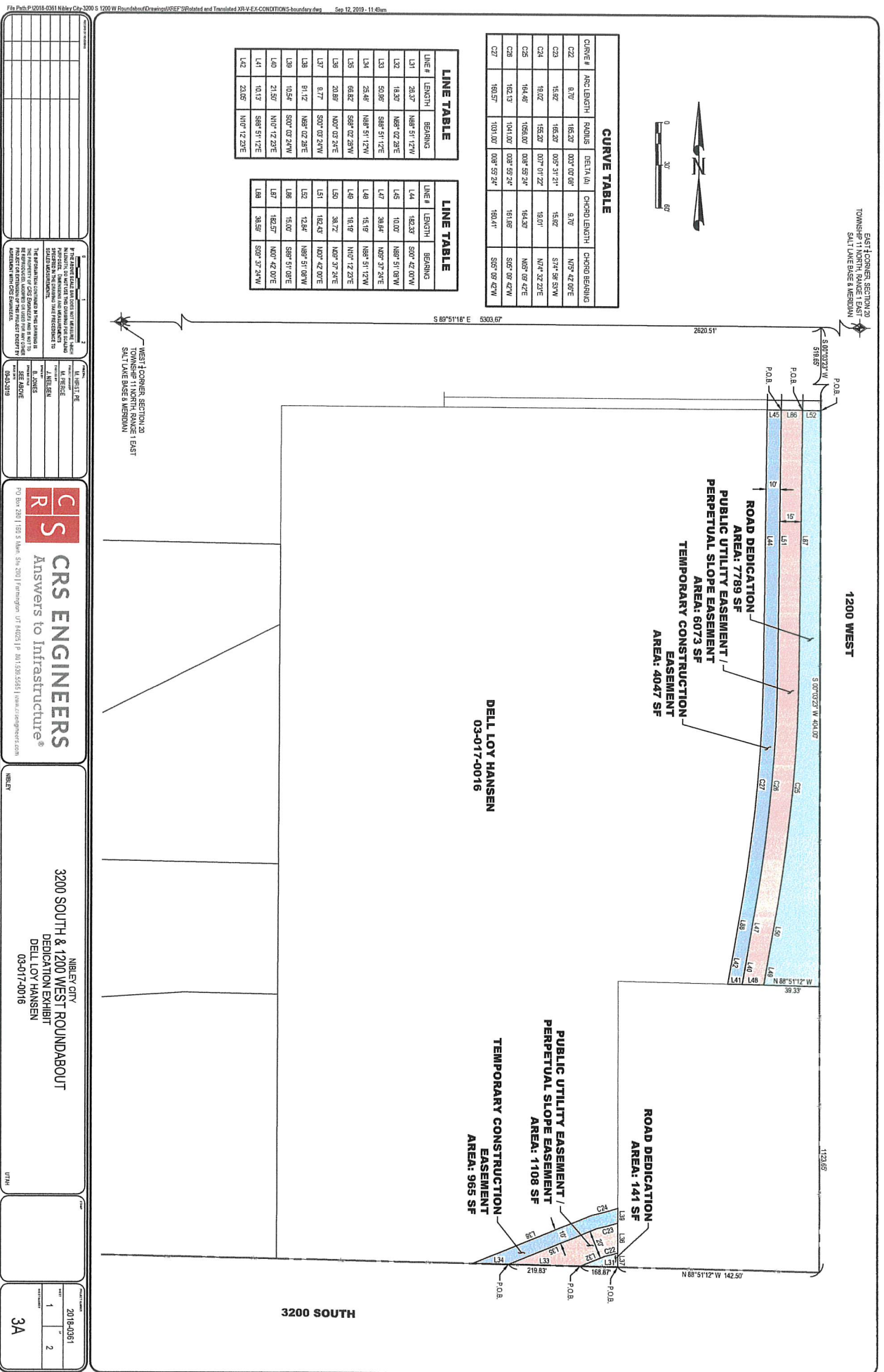
Date _____

Date _____

Date _____

Date _____

Exhibit A



CURVE TABLE			
CURVE #	ARC LENGTH	DELTA (d)	CHORD LENGTH
C22	9.70	165.20°	100.00' 00"
C23	15.82	165.20°	165.20' 00"
C24	18.02	155.20°	180.00' 00"
C25	164.48	105.00°	164.48' 00"
C26	162.13	104.00°	162.13' 00"
C27	160.57	103.00°	160.57' 00"

LINE TABLE		
LINE #	LENGTH	BEARING
L31	28.37	N88°51'12"W
L32	14.30	N88°02'28"E
L33	50.80	S88°51'12"E
L34	25.48	N88°51'12"W
L35	66.82	S88°02'28"W
L36	20.89	N00°00'24"E
L37	9.77	S00°00'24"W
L38	81.12	N88°02'28"E
L39	10.54	S00°00'24"W
L40	21.50	N88°12'23"E
L41	10.13	S88°51'12"E
L42	20.05	N88°12'23"E

LINE TABLE		
LINE #	LENGTH	BEARING
L44	162.33	S00°42'00"W
L45	10.00	N88°51'08"W
L47	38.84	N00°37'24"E
L48	15.00	N88°51'12"W
L49	18.19	N88°12'23"E
L50	38.72	N00°37'24"E
L51	162.43	N00°42'00"E
L52	12.94	N88°51'08"W
L53	15.00	S88°51'08"E
L57	162.57	N00°42'00"E
L58	38.59	S00°37'24"W

THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CRS ENGINEERS. IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF CRS ENGINEERS.

DATE	2018-03-01
BY	UTM
CHECKED BY	UTM
DATE	2018-03-01

CRS ENGINEERS
Answers to Infrastructure®

3200 SOUTH & 1200 WEST ROUNDABOUT
DEDICATION EXHIBIT
DELL LOY HANSEN
03-017-0016

ROADWAY DEDICATION

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 519.65 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°03'23"W, 404.00 FEET ALONG GRANTORS EAST PROPERTY LINE TO THE NORTH LINE OF PARCEL 03-017-0014; THENCE N.88°51'12"W, 39.33 FEET ALONG SAID NORTH LINE; THENCE N.10°12'23"E, 19.19 FEET; THENCE N.09°37'24"E, 38.72 FEET TO A POINT OF CURVATURE WITH A 1,056.00-FOOT RADIUS CURVE TO THE LEFT; THENCE NORTHERLY 164.46 FEET ALONG THE ARC OF SAID CURVE (NOTE: CHORD TO SAID CURVE BEARS N.05°09'42"E, 164.30 FEET, CENTRAL ANGLE EQUALS 08°55'24") TO A POINT OF TANGENCY; THENCE N.00°42'00"E, 182.57 FEET; THENCE S.89°51'08"E, 12.84 FEET TO THE POINT OF BEGINNING.

CONTAINING 7,789 SQUARE FEET OR 0.179 ACRE.

ALSO: A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS SOUTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 1,123.65 FEET AND N.88°51'12"W, 142.50 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE N.88°51'12"W, 26.37 FEET; ALONG SAID SOUTH PROPERTY LINE; THENCE N.68°02'28"E, 18.30 FEET; THENCE EASTERLY 9.70 FEET ALONG THE ARC OF A 185.20-FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (NOTE: CHORD TO SAID CURVE BEARS N.75°42'06"E, 9.70 FEET, CENTRAL ANGLE EQUALS 03°00'08"); THENCE S.00°03'24"W, 9.77 FEET TO THE POINT OF BEGINNING.

CONTAINING 1441 SQUARE FEET OR 0.003 ACRE.

PUBLIC UTILITY EASEMENT / PERPETUAL SLOPE EASEMENT

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 519.65 FEET AND N.89°51'08"W, 12.84 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 182.57 FEET TO A POINT OF CURVATURE WITH A 1,056.00-FOOT RADIUS CURVE TO THE RIGHT; THENCE SOUTHERLY 164.46 FEET ALONG THE ARC OF SAID CURVE (NOTE: CHORD TO SAID CURVE BEARS S.05°09'42"W, 164.30 FEET, CENTRAL ANGLE EQUALS 08°55'24") TO A POINT OF TANGENCY; THENCE S.09°37'24"W, 38.72 FEET; THENCE S.10°12'23"W, 19.19 FEET TO THE NORTH LINE OF PARCEL 03-017-0014; THENCE N.88°51'12"W, 15.19 FEET ALONG SAID NORTH LINE; THENCE N.10°12'23"E, 21.50 FEET; THENCE N.09°37'24"E, 38.64 FEET TO A POINT OF CURVATURE WITH A 1,041.00-FOOT RADIUS CURVE TO THE LEFT; THENCE NORTHERLY 162.13 FEET ALONG THE ARC OF SAID CURVE (NOTE: CHORD TO SAID CURVE BEARS N.05°09'42"E, 161.96 FEET, CENTRAL ANGLE EQUALS 08°55'24") TO A POINT OF TANGENCY; THENCE N.00°42'00"E, 182.42 FEET TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'08"E, 15.00 FEET ALONG SAID NORTH LINE TO THE POINT OF BEGINNING.

CONTAINING 6,073 SQUARE FEET OR 0.139 ACRE.

ALSO: A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS SOUTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 1,123.65 FEET AND N.88°51'12"W, 168.87 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE N.88°51'12"W, 50.96 FEET; ALONG SAID SOUTH PROPERTY LINE; THENCE N.68°02'28"E, 66.82 FEET; THENCE EASTERLY 15.92 FEET ALONG THE ARC OF A 165.20-FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (NOTE: CHORD TO SAID CURVE BEARS N.74°58'53"E, 15.92 FEET, CENTRAL ANGLE EQUALS 05°31'21") TO GRANTORS EAST PROPERTY LINE; THENCE S.00°03'24"W, 20.89 FEET ALONG SAID EAST PROPERTY LINE; THENCE WESTERLY 9.70 FEET ALONG THE ARC OF A 185.20-FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT (NOTE: CHORD TO SAID CURVE BEARS S.75°42'06"W, 9.70 FEET, CENTRAL ANGLE EQUALS 03°00'08"); THENCE S.68°02'28"W, 18.30 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,108 SQUARE FEET OR 0.025 ACRE.

TEMPORARY CONSTRUCTION EASEMENT

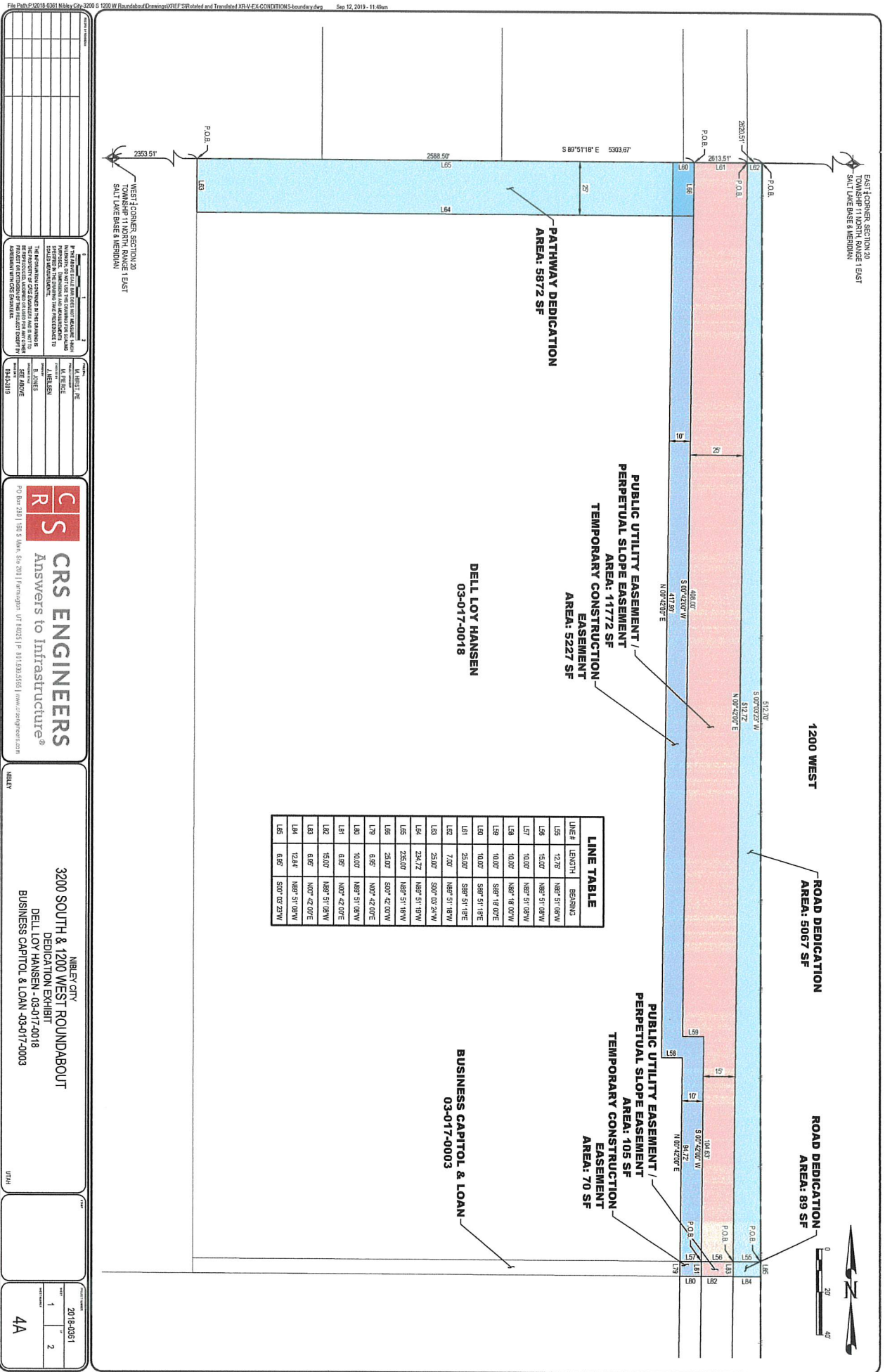
A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 519.65 FEET AND N.89°51'08"W, 27.84 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 182.42 FEET TO A POINT OF CURVATURE WITH A 1,041.00-FOOT RADIUS CURVE TO THE RIGHT; THENCE SOUTHERLY 162.13 FEET ALONG THE ARC OF SAID CURVE (NOTE: CHORD TO SAID CURVE BEARS S.05°09'42"W, 161.96 FEET, CENTRAL ANGLE EQUALS 08°55'24") TO A POINT OF TANGENCY; THENCE S.09°37'24"W, 38.64 FEET; THENCE S.10°12'23"W, 21.50 FEET TO THE NORTH LINE OF PARCEL 03-017-0014; THENCE N.88°51'12"W, 10.13 FEET ALONG SAID NORTH LINE; THENCE N.10°12'23"E, 23.05 FEET; THENCE N.09°37'24"E, 38.59 FEET TO A POINT OF CURVATURE WITH A 1,031.00-FOOT RADIUS CURVE TO THE LEFT; THENCE NORTHERLY 160.57 FEET ALONG THE ARC OF SAID CURVE (NOTE: CHORD TO SAID CURVE BEARS N.05°09'42"E, 160.41 FEET, CENTRAL ANGLE EQUALS 08°55'24") TO A POINT OF TANGENCY; THENCE N.00°42'00"E, 182.33 FEET TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'08"E, 10.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 4,047 SQUARE FEET OR 0.093 ACRE.

ALSO: A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS SOUTH PROPERTY LINE LOCATED S.89°51'18"E, 2,620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 1,123.65 FEET AND N.88°51'12"W, 219.83 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE N.88°51'12"W, 25.48 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.68°02'28"E, 91.12 FEET; THENCE EASTERLY 19.02 FEET ALONG THE ARC OF A 155.20-FOOT RADIUS NON-TANGENT CURVE TO THE LEFT (NOTE: CHORD TO SAID CURVE BEARS N.74°58'53"E, 19.01 FEET, CENTRAL ANGLE EQUALS 07°01'22") TO GRANTORS EAST PROPERTY LINE; THENCE S.00°03'24"W, 10.54 FEET ALONG SAID EAST PROPERTY LINE; THENCE WESTERLY 15.92 FEET ALONG THE ARC OF A 165.20-FOOT RADIUS NON-TANGENT CURVE TO THE RIGHT (NOTE: CHORD TO SAID CURVE BEARS S.74°58'53"W, 15.92 FEET, CENTRAL ANGLE EQUALS 05°31'21"); THENCE S.68°02'28"W, 66.82 FEET TO THE POINT OF BEGINNING.

CONTAINING 965 SQUARE FEET OR 0.022 ACRE.

CROSSING		M. 100' ±		2018-03-31	
N. 100' ±		M. 100' ±		2018-03-31	
S. 100' ±		M. 100' ±		2018-03-31	
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S. 100' ±		M. 100' ±		2018-03-31	
E. 100' ±					



PARCEL 03-017-0018 - DELL LOY HANSEN

ROAD DEDICATION

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE AND ON THE NORTH LINE OF THE SAID SW 1/4 LOCATED S.89°51'18"E, 2.620.51 FEET ALONG THE SECTION LINE FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°03'23"W, 512.70 FEET ALONG GRANTORS EAST PROPERTY LINE TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 12.76 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 512.72 FEET TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'18"E, 7.00 FEET ALONG SAID NORTH PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 5,067 SQUARE FEET OR 0.116 ACRE.

PUBLIC UTILITY EASEMENT / PERPETUAL SLOPE EASEMENT

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE AND ON THE NORTH LINE OF THE SAID SW 1/4 LOCATED S.89°51'18"E, 2.613.51 FEET ALONG THE SECTION LINE FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 512.72 FEET TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 15.00 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 104.63 FEET; THENCE N.89°18'00"W, 10.00 FEET; THENCE N.00°42'00"E, 408.00 FEET TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'18"E, 25.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 11,772 SQUARE FEET OR 0.270 ACRE.

TEMPORARY CONSTRUCTION EASEMENT

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE AND ON THE NORTH LINE OF THE SAID SW 1/4 LOCATED S.89°51'18"E, 2.568.50 FEET ALONG THE SECTION LINE FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 408.00 FEET; THENCE S.89°18'00"E, 10.00 FEET; THENCE S.00°42'00"W, 104.63 FEET TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 10.00 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 94.72 FEET; THENCE N.89°18'00"W, 10.00 FEET; THENCE N.00°42'00"E, 417.90 FEET TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'18"E, 10.00 FEET ALONG SAID NORTH PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 5,227 SQUARE FEET OR 0.120 ACRE.

PATHWAY DEDICATION

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE AND ON THE NORTH LINE OF THE SAID SW 1/4 LOCATED S.89°51'18"E, 2.353.51 FEET ALONG THE SECTION LINE FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.89°51'18"E, ALONG SAID LINE, A DISTANCE OF 235.00 FEET; THENCE S.00°42'00"W, 25.00 FEET; THENCE N.89°51'19"W, 234.72 FEET TO GRANTORS WEST PROPERTY LINE; THENCE N.00°03'24"E, 25.00 FEET ALONG SAID WEST PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 5,872 SQUARE FEET OR 0.135 ACRE.

PARCEL 03-017-0003 - BUSINESS CAPITOL & LOAN

ROAD DEDICATION

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2.620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 512.70 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°03'23"W, 6.95 FEET (10.48 FEET BY RECORD) ALONG GRANTORS EAST PROPERTY LINE TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 12.84 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 6.95 FEET (10.48 FEET BY RECORD) TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'08"E, 12.76 FEET ALONG SAID NORTH PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 89 SQUARE FEET OR 0.002 ACRE.

PUBLIC UTILITY EASEMENT / PERPETUAL SLOPE EASEMENT

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2.620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 512.70 FEET AND S.89°51'08"W, 12.76 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 6.95 FEET (12.48 FEET BY RECORD) TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 15.00 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 6.95 FEET (12.48 FEET BY RECORD) TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'08"E, 15.00 FEET ALONG SAID NORTH PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 105 SQUARE FEET OR 0.002 ACRE.

TEMPORARY CONSTRUCTION EASEMENT

A PART OF THE SW 1/4 OF SECTION 20, TOWNSHIP 11 NORTH, RANGE 1 EAST OF THE SALT LAKE BASE AND MERIDIAN, BEGINNING AT A POINT ON GRANTORS NORTH PROPERTY LINE LOCATED S.89°51'18"E, 2.620.51 FEET ALONG THE SECTION LINE AND S.00°03'23"W, 512.70 FEET AND N.89°51'08"W, 27.76 FEET FROM THE NW CORNER OF THE SAID SW 1/4; RUNNING THENCE S.00°42'00"W, 6.95 FEET (12.48 FEET BY RECORD) TO GRANTORS SOUTH PROPERTY LINE; THENCE N.89°51'08"W, 10.00 FEET ALONG SAID SOUTH PROPERTY LINE; THENCE N.00°42'00"E, 6.95 FEET (12.48 FEET BY RECORD) TO GRANTORS NORTH PROPERTY LINE; THENCE S.89°51'08"E, 10.00 FEET ALONG SAID NORTH PROPERTY LINE TO THE POINT OF BEGINNING.

CONTAINING 70 SQUARE FEET OR 0.002 ACRE.

NORTH	
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SOUTH	
WEST	
UTIEP	
2018-09-16	
2	
2	
48	

CRS ENGINEERS
Answers to Infrastructure®

3200 SOUTH & 1200 WEST ROUNDABOUT
DEDICATION - LEGAL DESCRIPTIONS
DELL LOY HANSEN - 03-017-0018
BUSINESS CAPITOL & LOAN - 03-017-0003

NIBLEY CITY

CRS ENGINEERS
Answers to Infrastructure®

3200 SOUTH & 1200 WEST ROUNDABOUT
DEDICATION - LEGAL DESCRIPTIONS
DELL LOY HANSEN - 03-017-0018
BUSINESS CAPITOL & LOAN - 03-017-0003

NIBLEY CITY

EAST-TORNER SECTION 22
TOWNSHIP 11 NORTH RANGE 1 EAST
SALT LAKE BASE & MERIDIAN

1200 WEST

S 00°03'21" W 823.35'



CURVE TABLE				
CURVE #	ARC LENGTH	RADIUS	DELTA (Δ)	CHORD BEARING
C28	74.62'	68.00'	047° 55' 52"	71.49°
C29	51.62'	165.20'	019° 03' 47"	51.75°
C31	40.60'	165.20'	014° 54' 53"	40.52°
C32	50.89'	68.00'	047° 55' 52"	55.24°
				N04° 10' 19"E

LINE TABLE			
LINE #	LENGTH	BEARING	
L29	47.70'	S10° 12' 23" W	
L30	33.62'	S80° 47' 37"E	
L31	22.75'	S10° 12' 23" W	
L32	10.69'	S58° 09' 15" W	
L33	20.89'	N00° 03' 21"E	
L34	10.69'	N58° 09' 15"E	
L35	18.22'	N10° 12' 22"E	
L36	33.62'	N89° 47' 37" W	
L37	48.64'	N10° 12' 22"E	
L38	20.25'	S89° 51' 12"E	

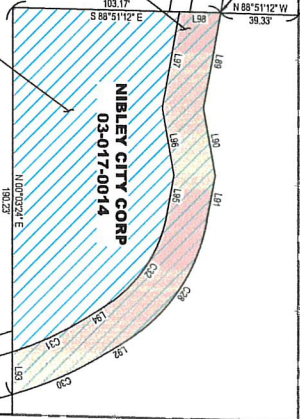
S 89° 51' 18" E 5303.67'

WEST-TORNER SECTION 20
TOWNSHIP 11 NORTH RANGE 1 EAST
SALT LAKE BASE & MERIDIAN

DELL LOY HANSEN
03-017-0016

PUBLIC UTILITY EASEMENT /
PERPETUAL SLOPE EASEMENT
(INCLUDED AS PART OF THE DEDICATION)
AREA: 4494 SF

NIBLEY CITY DEDICATION
TO DELL LOY HANSEN
AREA: 15928 SF



3200 SOUTH

1" = 100'	1" = 200'	1" = 400'
0	1	2

DATE	2018-03-01
BY	UTAH
CHECKED	UTAH
APPROVED	UTAH



CRS ENGINEERS
Answers to Infrastructure®

PO Box 208 | 145 S Main, Ste 200 | Farmington, UT 84201 | P: 801.339.5565 | F: 801.339.5566 | www.crsengineers.com

NIBLEY CITY
DEDICATION EXHIBIT
NIBLEY CITY CORP
03-017-0014

1. PROJECT NUMBER		2. PROJECT NAME	
3. PROJECT LOCATION		4. PROJECT DESCRIPTION	
5. PROJECT OWNER		6. PROJECT MANAGER	
7. PROJECT BUDGET		8. PROJECT SCHEDULE	
9. PROJECT RISK		10. PROJECT STATUS	
11. PROJECT CONTACT		12. PROJECT COMMENTS	
13. PROJECT APPROVAL		14. PROJECT SIGNATURE	
15. PROJECT DATE		16. PROJECT TIME	
17. PROJECT LOCATION		18. PROJECT DESCRIPTION	
19. PROJECT OWNER		20. PROJECT MANAGER	
21. PROJECT BUDGET		22. PROJECT SCHEDULE	
23. PROJECT RISK		24. PROJECT STATUS	
25. PROJECT CONTACT		26. PROJECT COMMENTS	
27. PROJECT APPROVAL		28. PROJECT SIGNATURE	
29. PROJECT DATE		30. PROJECT TIME	
31. PROJECT LOCATION		32. PROJECT DESCRIPTION	
33. PROJECT OWNER		34. PROJECT MANAGER	
35. PROJECT BUDGET		36. PROJECT SCHEDULE	
37. PROJECT RISK		38. PROJECT STATUS	
39. PROJECT CONTACT		40. PROJECT COMMENTS	
41. PROJECT APPROVAL		42. PROJECT SIGNATURE	
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45. PROJECT LOCATION		46. PROJECT DESCRIPTION	
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51. PROJECT RISK		52. PROJECT STATUS	
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63. PROJECT BUDGET		64. PROJECT SCHEDULE	
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97. PROJECT APPROVAL		98. PROJECT SIGNATURE	
99. PROJECT DATE		100. PROJECT TIME	
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103. PROJECT OWNER		104. PROJECT MANAGER	
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109. PROJECT CONTACT		110. PROJECT COMMENTS	
111. PROJECT APPROVAL		112. PROJECT SIGNATURE	
113. PROJECT DATE		114. PROJECT TIME	
115. PROJECT LOCATION		116. PROJECT DESCRIPTION	
117. PROJECT OWNER		118. PROJECT MANAGER	
119. PROJECT BUDGET		120. PROJECT SCHEDULE	
121. PROJECT RISK		122. PROJECT STATUS	
123. PROJECT CONTACT		124. PROJECT COMMENTS	
125. PROJECT APPROVAL		126. PROJECT SIGNATURE	
127. PROJECT DATE		128. PROJECT TIME	
129. PROJECT LOCATION		130. PROJECT DESCRIPTION	
131. PROJECT OWNER		132. PROJECT MANAGER	
133. PROJECT BUDGET		134. PROJECT SCHEDULE	
135. PROJECT RISK		136. PROJECT STATUS	
137. PROJECT CONTACT		138. PROJECT COMMENTS	
139. PROJECT APPROVAL		140. PROJECT SIGNATURE	
141. PROJECT DATE		142. PROJECT TIME	
143. PROJECT LOCATION		144. PROJECT DESCRIPTION	
145. PROJECT OWNER		146. PROJECT MANAGER	
147. PROJECT BUDGET		148. PROJECT SCHEDULE	
149. PROJECT RISK		150. PROJECT STATUS	
151. PROJECT CONTACT		152. PROJECT COMMENTS	
153. PROJECT APPROVAL		154. PROJECT SIGNATURE	
155. PROJECT DATE		156. PROJECT TIME	
157. PROJECT LOCATION		158. PROJECT DESCRIPTION	
159. PROJECT OWNER		160. PROJECT MANAGER	
161. PROJECT BUDGET		162. PROJECT	

Agenda Item #11

Description	Workshop – Ordinance 21-03: Commercial Zoning Standards
Department	Planning
Presenter	Levi, Roberts, Planner
Recommendation	Discuss the proposed Commerical Zoning Standards. Give direction to have Ordinance 21-03 put on the City Council agenda for consideration and to hold a public hearing.
Reviewed By	City Manager, City Planner

Background:

The Planning Commission is recommending specific changes related to commercial zoning standards related to setback requirements and the site plan review process.

The first recommended change addresses requirements for site plan review for new commercial and industrial development. Currently, NCC 19.14.050 (M) provides a process for site plan review, which includes a concept presentation, preliminary approval (of Planning Commission and City Council) and a final approval (of Planning Commission and City Council). The Planning Commission and City Staff believe that for most developments, this process is overly arduous for applicants and should be simplified. It should also articulate in which instances a new development should go through the site plan review process and should be inclusive of industrial development, as well. During the December 3 meeting, the Planning Commission recommended developing thresholds for approval authority for site plans. For buildings less than 500 sq ft, the City Planner would be the approval authority. For buildings greater than 500 sq ft and less than 10,000 sq ft, the Planning Commission would be the approval authority. For buildings greater than 10,000 sq ft, the City Council would be the approval authority with a recommendation from the Planning Commission. For developments of this scale (greater than 10,000 sq ft), a concept presentation would also be required to be made to the planning commission prior to final approval.

The second change addresses mitigating impact when commercial uses are adjacent to residential uses. When approving the recent annexation of Malouf, the City Council expressed the concern of new commercial development creating shadows and having other impacts if buildings are in close proximity to homes. This can be addressed through setback requirements of 19.22, which already has additional setback requirements in industrial zones. In the December 3 and 17 meeting, it was discussed to have a minimum setback requirement when a commercial zone abuts a residential zone or dwelling, with additional setback needed when the height exceeds the minimum setback. There was some concern about the potential negative impact this may have on economic development in the City and Staff was directed to submit some examples of commercial building setbacks which are adjacent to residential zones. Within Cache Valley, it appears that there are limited examples of commercial buildings directly adjacent to residential, which have minimal setbacks. In some cases, it does appear that they are out of scale with the context of the neighborhood and additional setback requirements may mitigate potential negative impacts. Based upon the discussion, Staff recommends that in Commercial zones, there should be a minimum setback of 30 feet for additional buildings with one additional foot of required setback for buildings higher than 30 feet. In neighborhood commercial zones, staff recommends a lower minimum setback of 20 feet. This is more appropriate, as neighborhood commercial development already has other restrictions related to square footage and height restrictions and are meant to integrate into residential neighborhoods. That said, some uses may have detrimental impacts upon adjacent housing, which can be mitigated with additional setback requirements.

Planning Commission Recommendation

Approval of 21-03: Commercial Zoning Standards with the addition that developments of over 10,000 sq ft will require a concept presentation.

Recommended Findings

- The recommended changes improve the clarity and appropriateness of the site plan review process for commercial, industrial and institutional development
- Commercial development may have detrimental impacts when adjacent to residential development that may be mitigated by additional setback standards

19.14 Commercial And Neighborhood Commercial Zoning Standards

19.14.010		Purpose
19.14.020	Use	Regulations
19.14.030	Space	Requirements
19.15.040	Parking	Requirements

19.14.050 Neighborhood Commercial Zone C-N

HISTORY

Adopted by Ord. 20-09 on 5/14/2020

19.14.010 Purpose

The purpose of the commercial zone is to provide suitable areas for the location of commercial activities needed to serve the people and commerce of the city. Retail commercial activities which serve the residents of the city will be encouraged.

19.14.020 Use Regulations

See NCC 19.20

19.14.030 Space Requirements

See NCC 19.22

19.14.040 Parking Requirements

See NCC 19.24.160.

19.14.050 Site Plan Review

A. Site Plan Review and Approval Process: Any proposed development of commercial, institutional or industrial uses, including new buildings, expansion of or addition to existing buildings, or change in type use of existing buildings, must meet the requirements of design standards for commercial and institutional uses, as applicable, and the provisions of this title and other applicable standards.

1. Approval Process: All proposed development described in this section are subject to the following site plan approval process. At each stage of the process, applicants shall be required to submit relevant application forms and pay applicable fees.

a. Preapplication Conference: Prior to submitting a site plan application, developers shall meet with the City Planner to become acquainted with the development requirements, procedures and schedules, and to discuss potential issues with the project. At this time, developer shall present the city planner with a general site plan and inform the City Planner of plans for the development.

b. Concept Presentation: Following determination of compliance at the preapplication conference, all proposals for development, redevelopment or additions to buildings greater than 10,000 sq ft shall be required to present and receive approval of a concept plan from the planning commission.

At this time, the planning commission may give preliminary input on the development concept. This input shall be based on the concept's compliance with the Nibley City general plan and all applicable state and local ordinances.

c. Site Plan Review: For all commercial, institutional and industrial development, including new buildings, expansion of or addition to existing buildings, or change

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Use

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Each Commercial Development and Use shall obtain a business license from Nibley City. Commercial Uses as listed in NCC 19.20 as a conditional use shall also obtain a Conditional Use Permit before construction of new developments or operation of a business for existing commercial developments and buildings.¶

Traffic and Connectivity¶

Roadways and intersections shall maintain a Level of Service (LOS) C. Commercial applicants may be required to make any road updates in order to ensure the roadway will maintain LOS C.¶

Site plans must comply with the Transportation and Trails Master Plan.¶

Applicants may be required to provide an additional vehicle access to the site for one or more of the following reasons¶

There is only one vehicle access road to the site¶

Allow for greater emergency access to the site¶

Provide for better connectivity and enhance the safety of surrounding roadways and intersections.¶

Construction access to minimize impact to existing homes and infrastructure¶

Utilities¶

Prior to the issuance of a business license or conditional use permit, utility lines shall be updated to comply with water, sewer and stormwater master plans within the application property and adjacent rights-of-way.¶

A business license or conditional use permit shall only be granted if the City can reasonably supply water and sewer services to the applicant for their proposed use. The City may require an applicant to surrender water shares or water rights.¶

Applicants shall connect to service lines needed to supply the use of an application and shall be responsible for all associated costs.¶ ... [1]

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in the type of use of existing buildings, developer is required to receive approval from the following bodies, as set forth:

1. For development, redevelopment, or additions to buildings which are below 500 sq ft, the City Planner shall be the site plan approval authority.
 2. For development, redevelopment, or additions to buildings which are greater than 500 sq ft and less than 10,000 sq ft, the Planning Commission shall be the site plan approval authority.
 3. For development, redevelopment, or additions to buildings which are greater than 10,000 sq ft, the City Council shall be the site plan approval authority. Such site plans shall only be presented to the City Council after a recommendation of the Planning Commission.
2. Site Plan Specifications: The site plan shall be prepared, submitted and reviewed in accordance with the Nibley City Code and Standards, as applicable, including Design Standards for Commercial and Institutional Development.
- a. At the time of site plan application, developer shall be required to submit the following plans, drawn to a scale not to exceed one inch equals three hundred feet (1" = 300'):
 1. Overall site plan, including location of buildings, open space, parking, landscaping and pedestrian and traffic circulation, all existing residences, buildings, existing streets and proposed streets within three hundred feet (300') of the site in all directions.
 1. Architectural renderings and elevations, demonstrating building materials and colors.
 2. General drainage and utility layout with topography, showing all topographic features.
 2. As part of the site plan application, the developer shall be required to submit construction drawings that are compliant with the Nibley City Design Standards and Specifications.
 3. As part of the site plan application, the developer shall describe the source, layout, and availability of utilities and utility connections. In particular, the developer shall describe the anticipated water requirements of the proposed development and the developer's plan for supplying water to the site.
 - b. Site Plan Modifications and Amendments: Except as may be provided for elsewhere in this chapter, no element of an approved site plan shall be changed or modified substantially without first obtaining approval of the proposed amendment with the same procedure of the original site plan approval. Substantial modification shall include the change in use of a structure, as defined in 19.20.020, or any modification that changes at least five percent (5%) of the total area in the approved site plan.
 - c. Time Limitations: Developer shall have one year from the date of final site plan submittal to obtain final plan approval. Extensions of time may be granted by the planning commission and/or city council for a period of not longer than one year upon submittal of a request for extension of time, and showing of good cause prior to the expiration of the initial approval or an approved extension of time. A second time extension may be requested, and if granted, the extension can be no longer than six (6) months. No other time extensions shall be granted. Developer shall have to start the design review process over. Self-imposed and economic hardships shall not be a basis for granting an extension.
3. Applicants which require a Conditional Use Permit may submit a site plan at the time they submit a conditional use permit and need not submit a separate application.

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19.14.060 Commercial Zone Requirements

A. Use Permit

1. Each Commercial Development and Use shall obtain a business license from Nibley City. Commercial Uses as listed in NCC 19.20 as a conditional use shall also obtain a Conditional Use Permit before construction of new developments or operation of a business for existing commercial developments and buildings.

B. Traffic and Connectivity

1. Roadways and intersections shall maintain a Level of Service (LOS) C. Commercial applicants may be required to make any road updates in order to ensure the roadway will maintain LOS C.
2. Site plans must comply with the Transportation and Trails Master Plan.
3. Applicants may be required to provide an additional vehicle access to the site for one or more of the following reasons
 - a. There is only one vehicle access road to the site
 - b. Allow for greater emergency access to the site
 - c. Provide for better connectivity and enhance the safety of surrounding roadways and intersections.
 - d. Construction access to minimize impact to existing homes and infrastructure

C. Utilities

1. Prior to the issuance of a business license or conditional use permit, utility lines shall be updated to comply with water, sewer and stormwater master plans within the application property and adjacent rights-of-way.
2. A business license or conditional use permit shall only be granted if the City can reasonably supply water and sewer services to the applicant for their proposed use. The applicant shall be required to supply necessary water rights or shares in accordance with NCC 21.12.020.
3. Applicants shall connect to service lines needed to supply the use of an application and shall be responsible for all associated costs.
 - a. If no utility lines are available or current utility lines and services are determined to be insufficient for the proposed use by the City Engineer, the applicant shall build or install the needed infrastructure before a business license or conditional use permit may be granted.

D. Each Commercial building shall be built to the standards in Nibley City Design Standards for Commercial and Institutional Uses except for Remodeled Residential Units as stated within this chapter.

E. All commercial buildings shall comply with fire code and are subject to inspection of the Fire Marshall before a business license or conditional use permit is granted. New commercial buildings shall also be inspected by the Fire Marshal before a certificate of occupancy can be given. All commercial buildings shall be subject to an annual inspection by the Fire Marshal, and any license, permit, or certificate issued for a building or use may be revoked for failure to comply with fire code.

F. All site plans shall be approved by the City's Engineer and Public Works departments. All site plans shall comply with Nibley City Design Standards and all projects located in Commercial and Neighborhood Commercial Zone shall comply with Nibley City Design Standards for Commercial and Institutional Use.

G. Residential Units Remodeled for Commercial Use:

1. Nibley City Design Standards for Commercial and Institutional Use facade treatments shall not apply to single family homes that have been remodeled for commercial use. Such homes may be referred to as "Remodeled Residential Units."

- 2. Remodeled Residential Units must comply with landscaping, parking, fire code, the Americans with Disability Act (ADA) requirements, building permit requirements, inspections, and all other standards and requirements described within this title.
- 3. Any business taking place in a remodeled residential unit is considered a conditional use and shall obtain a conditional use permit prior to beginning operations, regardless of the use within the building. Any change in the business or use of the Remodeled Residential Unit shall require a new conditional use permit.
- 4. The Commercial Use shall be the primary use of the building.
- 5. The exceptions for Remodeled Residential Units shall only apply to buildings on lots which front collector or arterial streets, as defined by the Nibley City Master Streets Plan.
- H. The City may require the placement of fences or walls to enhance security and mitigate aesthetic or other impacts at facilities adjacent to residential areas.
- I. In Commercial Zones, warehousing and storage may be allowed as part of business if it is attached to offices, retail, or other permitted or conditional use allowed within a Commercial Zone.
- J. All Commercial developments shall comply with landscaping code within NCC 19.24.170.

19.14.050 Neighborhood Commercial Zone C-N Requirements

B. Purpose

- 1. The neighborhood commercial zone C-N is established to provide areas in which the primary use of land is for commercial and service uses to:
 - a. Serve the daily convenience needs of the adjacent residential neighborhoods.
 - b. Provide economic stability.
 - c. Enhance property values.
 - d. Establish strategies for achieving good community design.
 - e. Stabilize areas/zones.
 - f. Reduce traffic congestion and promote walkable communities.
 - g. Promote the policies of the general plan.
- 2. This C-N zone shall be located in areas deemed appropriate and approved by the city council for services to the residents of the city. The zone will create a minimum of detriment, hazard, noise or inconvenience to surrounding residential development.
- 3. The C-N zone shall be characterized by harmonious grouping and architectural offset of building mass of commercial stores and shops which will be architecturally designed for, and will function as, an integrated unit. Clean parking lots and attractive well maintained shops with appropriate landscaping will also be characteristic of this zone.
- 4. Lighting will be of low intensity, low profile and fully shielded to protect the surrounding residential areas. The architectural design and character will be compatible with that of the surrounding residential environment.
- 5. Heavy commercial uses within this zone have been excluded and are not permitted.

C. Permitted Uses: See NCC 19.20.

D. Conditional Uses:

- 1. Regular Conditional Uses: See NCC 19.20.
- 2. Temporary Accessory Uses: Temporary accessory uses and structures are permitted in the C-N zone, provided they are incidental to, and do not substantially alter the character of, the permitted use or structure. Such permitted accessory uses and structures include, but are not limited to, the following: Storage of materials used for construction of a building, including the contractor's temporary office, provided that such use is on the building site or immediately adjacent thereto and provided further that such shall be permitted only during construction period and thirty (30) days thereafter.
- 3. Use Limitations: All other uses not listed are not permitted.
- 4. Residential Units Remodeled for Commercial Use:

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- a. Nibley City Design Standards for Commercial and Institutional Use facade treatments shall not apply to single family homes that have been remodeled for commercial use. Such homes may be referred to as "Remodeled Residential Units."
 - b. Remodeled Residential Units must comply with landscaping, parking, fire code, the Americans with Disability Act (ADA) requirements, building permit requirements, inspections, and all other standards and requirements described within this title.
 - c. Any business taking place in a remodeled residential unit is considered a conditional use and shall obtain a conditional use permit prior to beginning operations, regardless of the use within the building. Any change in the business or use of the Remodeled Residential Unit shall require a new conditional use permit.
- E. ~~Lot Coverage: No building, structure, or group of buildings with their accessory buildings shall cover more than seventy percent (70%) of the lot or parcel.~~
- F. ~~Parking: Where possible, parking areas shall be located to the side or rear of building. On corner lots, parking shall be avoided on side yards contiguous to the street.~~
- G. Building Size: The maximum size building footprint allowed shall not exceed a total of fifteen thousand (15,000) square feet.
- H. Commercial Condominiums
1. Commercial Condominiums, shall be a permitted use in the Neighborhood Commercial zone, as set forth herein.
 2. All shared or common properties, landscaping, parking lots, roadways, and other non-public amenities or improvements that serve the commercial condominium shall be maintained by an owners association, pursuant to duly adopted and recorded agreements.
 3. If a development chooses to build condominiums, they must provide sufficient parking and landscaping for each unit, consistent with current City Commercial standards at the time of the rezone application.
 4. Front, rear, and side setbacks shall be measured from the foundation walls of the building.
 5. There shall be a maximum of five commercial condominium units per acre.
- I. Off Street Parking, Loading, And Access:
1. The requirements of design standards for commercial and institutional uses and NCC 19.24.160, "Parking Requirements", shall apply.
 2. The site shall be developed to provide for shared access.
 3. The developer/owner of a neighborhood commercial development located along a state-owned highway will cause the required traffic impact study to be performed in conformance with the requirements of the Utah Department of Transportation and provide to the city a valid copy of the UDOT letter of approval.
- J. Signs: The requirements of design standards for commercial and institutional uses shall apply to this zone. Only monument signage will be allowed, and only in the twenty foot (20') front yard setback.
- K. ~~Fencing and Screening: Fencing and screening shall meet the requirements of design standards for commercial and institutional uses; NCC 19.22.010(E), "Fences and walls maximum height"; NCC 19.24.090, "Fence Regulations"; and NCC 19.24.170(C), "Commercial And Industrial Zones" (landscape requirements), shall be required of all fences and landscape screening in this zone.~~
- L. Storage; Displays: All materials, supplies, merchandise, or other similar matter not on display for direct sale, rental or lease to the ultimate consumer or user, not able to be stored within the commercial structure shall be stored in a completely enclosed building.
- M. Storage; Trash:

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Deleted: <#> Density Requirements: Each single lot or parcel of land in the C-N zone shall contain a minimum of one-fourth (1/4) acre to allow for the building, site development, parking, required landscaping and stormwater detention. Stormwater detention can be planned as one shared basin.¶
Lot Frontage: The combined, contiguous parcels or lot of land in the C-N zone shall abut a public street for a minimum distance of one hundred feet (100'). ¶

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Front Yard: Each yard or parcel in the C-N zone shall have a store front yard of not less than twenty feet (20'). ¶
Side Yard: Each yard or parcel of land in the C-N zone shall have a side yard of not less than ten feet (10'). The minimum side setback from an adjacent residential zone shall be ten feet (10'). ¶
Side Yard; Corner Lots: On corner lots the side yard contiguous to the street shall not be less than twenty feet (20') in width and shall not be used for vehicular parking

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Rear Yard: Each lot or parcel of land in the C-N zone shall have a rear yard of not less than five feet (5'), but at a minimum shall match the space requirements for the rear yard setback of the adjoining zone except the rear yard setback shall be thirty feet (20') adjacent to a residential zone. ¶ ... [2]

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Moved up [2]: <#>At this time, developer shall present a general site plan and inform the city planner of plans for

Moved up [3]: <#>Concept Presentation: Following determination of compliance at the preapplication

Deleted: <#>Preliminary Site Plan Approval: Upon receiving approval of a concept, developers shall be ... [4]

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1. No trash, garbage, used materials or wrecked, inoperable or abandoned vehicles or equipment shall be stored in an open area. All such materials shall be kept in an enclosed building(s) or structure.
2. All structures built to accommodate the storage shall be constructed using a design compatible with the primary structure and meeting all the architectural design standards outlined in the design standards for commercial and institutional uses. Within a development of multiple structures, a common structure shall be constructed suitable for use by all tenants or businesses.

N. Development Standards: The development standards of the C-N zone shall conform to design standards for commercial and institutional uses.

O. Utilities

1. Prior to the issuance of a business license or conditional use permit, utility lines shall be updated to comply with water, sewer and stormwater master plans within the application property and adjacent rights-of-way.
2. A business license or conditional use permit shall only be granted if the City can reasonably supply water and sewer services to the applicant for their proposed use. The applicant shall be required to supply necessary water rights or shares in accordance with NCC 21.12.020.
3. Applicants shall connect to service lines needed to supply the use of an application and shall be responsible for all associated costs.
 - a. If no utility lines are available or current utility lines and services are determined to be insufficient for the proposed use by the City Engineer, the applicant shall build or install the needed infrastructure before a business license or conditional use permit may be granted.

P.

19.16 Industrial Zone I

19.16.010		Purpose
19.16.020	Use	Regulations
19.16.030	Space	Requirements
19.16.040	Parking	Requirements

19.16.010 Purpose

The purpose of the industrial zone is to provide suitable areas that will accommodate the need for industry and industrial-related uses.

19.16.020 Use Regulations

See NCC 19.20.

19.16.030 Space Requirements

See NCC 19.22.

19.16.040 Parking Requirements

See NCC 19.24.160.

19.16.050 Site Plan Review All proposed commercial, institutional, or industrial development, including new buildings and expansion of or addition to existing buildings, or change in the type of use of existing buildings, are subject to the site plan review requirements of NCC 19.14.050

19.22 Space Requirements Chart

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19.22.010 Space Requirements Chart

		A	R-E	R-1	R-1A	R-2	R-2A	C	C-N	I
A.	Minimum lot area	5 acres	2 acres	1 acre	3/4 acre	1/2 acre	12,000 sq. ft. (10) See note 9	--	1/4 acre	--
	Minimum lot width, measured at setback line	200	200	200	150	100	100	--	100	--
B.		Setback principal uses								
	Front yard	30(35) ³	30(35) ³	30(35) ³	30(35) ³	30(35) ³	30(35) ³	20	20	50
	Side yard, interior	15 ³	15	10	10	10	10	0(10) ³ (30*) ¹¹	10(20*) ¹¹	0(50) ⁴
	Side yard, street	25(35) ³	25(35) ³	25(35) ³	25(35) ³	25(35) ³	25(35) ³	20	20	25(35) ³
	Rear yard	30	30	30	30	25	25	0(10) ³ (30*) ¹¹	5(20*) ¹¹	0(50) ⁴
C.		Setback accessory uses								
	Front yard	30(35) ³	30(35) ³	30(35) ³	30(35) ³	30(35) ³	30(35) ³	20	20	50
	Side yard, interior	10(3) ⁵	10(3) ⁵	10(3) ⁵	10(3) ⁵	10(3) ⁵	10(3) ⁵	0(10) ⁴	0(10) ⁴	0(10) ⁴
	Side yard, street		25(35) ³	25(35) ³	25(35) ³	25(35) ³	25(35) ³	20	20	25(35) ³

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	Rear yard	1(10) ⁶	1(10) ₆	1(10) ₆	1(10) ₆	1(10) ₆	1(10) ⁶	1(10) ⁴	1(10) ⁴	1(10) ⁴
D.		Height maximum								
	Principal uses	40	40	40	40	40	40	40	35 ¹²	50(70) ₀ ¹
	Accessory uses	30	30	30	30	20	20	30	20	30
E.		Fences and walls maximum height								
	Front yard, property line to setback line	4	4	4	4	4	4	4	4	4
	Rear yard	7(8)8	7(8)8	7(8)8	7(8)8	7(8) ₈	7(8)8	7(8)8	7(8)8	7(8)8
	Side yard	7(8)8	7(8)8	7(8)8	7(8)8	7(8) ₈	7(8)8	7(8)8	7(8)8	7(8)8
	Corner lots	See NCC 19.24.090(B)								

Notes:

1. In all zones in a platted subdivision, lot width is 100 feet minimum, at setback line, but lot area must be 1/2 acre.
2. All measurements are in feet unless otherwise specified.
3. Greater distance required where yard faces arterial road.
4. Greater distance required where property line is adjacent to residential zone or residential dwelling unit.
5. Lesser distance allowed where accessory building is at least 10 feet behind the rear of main building and not less than 10 feet from any dwelling unit on adjacent property.
6. Greater distance required where rear yard faces side yard of adjacent property.
7. Principal use is defined as a dwelling unit in R-E, R-1 and R-2.
8. 8 foot height allowed for a transparent fence, e.g., chainlink, as defined in NCC 19.24.090.
9. The average lot size for the entire subdivision phase and portion thereof shall average at least fourteen thousand (14,000) sq. ft.
10. Greater maximum height allowed if building is at a minimum of 300' from a residential zone.
11. When abutting a residential zone or existing residential dwelling unit, minimum setback is 30 feet for commercial zones and 20 feet for neighborhood commercial zones. The minimum setback shall be increased one additional foot for every additional one foot in height of the building in a commercial zone.

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HISTORY

Adopted	by	Ord.	No	Source	on	6/3/1993
Amended	by	Ord.		03-08	on	4/17/2003
Amended	by	Ord.		<u>06-04</u>	on	6/15/2006
Amended	by	Ord.		<u>17-06</u>	on	3/16/2017
Amended by Res. <u>19-10</u> on 6/27/2019						

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