#### JOINT FLAGSTAFF CITY COUNCIL/COUNTY BOARD OF SUPERVISOR WORK SESSION AGENDA

#### JOINT CITY/COUNTY WORK SESSION MONDAY NOVEMBER 4, 2019

COUNCIL CHAMBERS 211 WEST ASPEN AVENUE 4:00 P.M.

- 1. Call to Order
- 2. Pledge of Allegiance and Mission Statement

#### **MISSION STATEMENT**

The mission of the City of Flagstaff is to protect and enhance the quality of life for all.

#### 3. <u>ROLL CALL</u>

NOTE: One or more Councilmembers may be in attendance telephonically or by other technological means.

CHAIRWOMAN FOWLER VICE-CHAIRMAN PARKS SUPERVISOR ARCHULETA

SUPERVISOR BABBOTT SUPERVISOR RYAN

MAYOR EVANS VICE MAYOR SHIMONI COUNCILMEMBER ASLAN COUNCILMEMBER MCCARTHY

COUNCILMEMBER ODEGAARD COUNCILMEMBER SALAS COUNCILMEMBER WHELAN

#### 4. Public Participation:

Public Participation enables the public to address the Council about an items that the agenda. Public Participation appears on the agenda twice, at the beginning and at the end of the work session. You may speak at one or the other, but not both. Anyone wishing to comment on an item that is on the agenda is asked to fill out a speaker card and submit it to the recording clerk. When the item comes up on the agenda, your name will be called. You may address the Council up to three times throughout the meeting, including comments made during Public Participation. Please limit your remarks to three minutes per item to allow everyone an opportunity to speak.

#### 5. Flagstaff-Coconino County Community Census Team Informational Update

- 6. Museum Fire Incident and Flood Mitigation Update
- 7. Informational Items To/From Chairman, Supervisors and County Manager, Mayor, Council and City Manager

## 8. Public Participation

#### 9. Adjournment

#### CERTIFICATE OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Flagstaff City Hall on \_\_\_\_\_\_, at \_\_\_\_\_\_ a.m./p.m. in accordance with the statement filed by the City Council with the City Clerk.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

Stacy Saltzburg, MMC, City Clerk

## CITY OF FLAGSTAFF

#### STAFF SUMMARY REPORT

To:The Honorable Mayor and CouncilFrom:Sara Dechter, AICP, Comprehensive Planning<br/>ManagerDate:10/23/2019Meeting<br/>Date:11/04/2019Date:11/04/2019



## TITLE:

## Flagstaff-Coconino County Community Census Team Informational Update

#### **DESIRED OUTCOME:**

Inform the City Council and Board of Supervisors on progress made on the community-led outreach for the 2020 Census. Either at the next Joint Meeting or at a special work session in early 2020, the team will have more details on direct action for the City's and County's elected bodies to help promote the Census and will be seeking their feedback on how to conduct this important community outreach.

#### **EXECUTIVE SUMMARY:**

The Flagstaff-Coconino County Community Census Team is working with the US Census Bureau and partners throughout the community to prepare for the Census 2020 outreach campaign and operations. In summer and fall 2019, the team has been providing public information to match the Census's "education" phase by raising awareness of the upcoming Census operations through community events, and by disseminating information on Census recruiting. The team is also preparing for the Awareness and Motivation messaging in Coconino County to be well-coordinated with the national, state and other local campaigns, especially the Phoenix-Maricopa County efforts.

#### **INFORMATION:**

See attachments

## Attachments: Census Presentation Flagstaff - Coconino County Community Census Team Fall 2019 Progress Report Minutes Attachments

No file(s) attached.

# Coconino County/Flagstaff Joint County-City Work Session 2020 Census Update

November 4, 2019

Sara Dechter, Comprehensive Planning Manager, City of Flagstaff Kim Musselman, Director of Special Initiatives, Coconino County

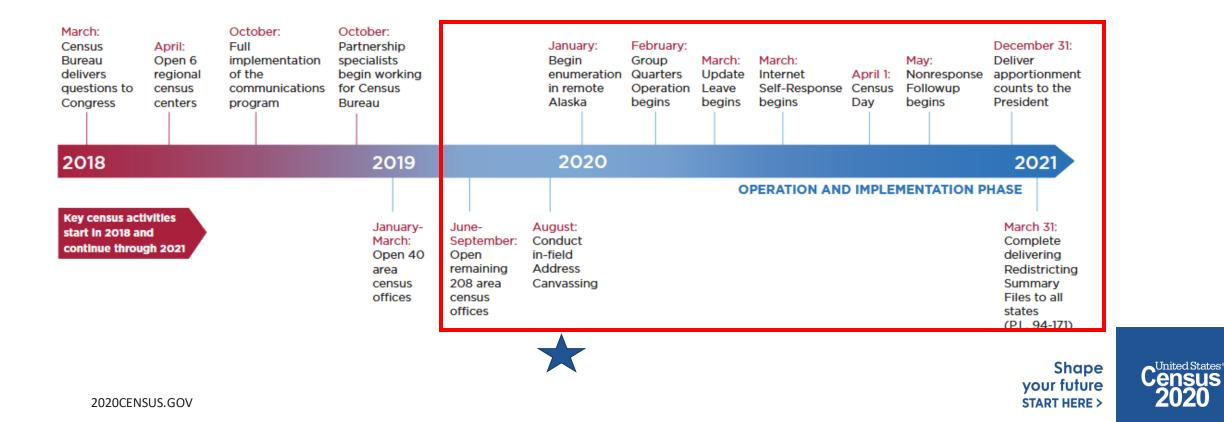
Based on a presentation by: **Kimberley Robinson,** *Partnership Specialist- Coconino, Navajo, Apache county* U.S. Census Bureau

Shape your future START HERE >



# Road to the 2020 Census

## **2020 Census Operational Timeline**



# Phased Approach to Communications

- Education Phase 2018-2019
- Awareness Phase January 2020
- Motivation Phase March May 2020
- Reminder Phase May July 2020
- Thank You Phase Starts July 2020











## I COUNT. YOU COUNT. TOGETHER WE CAN OPEN DOORS TO BETTER SCHOOLS.

The is a critical year for Coconino County. By completing the 120 US Correct, you'll help make sure our ser ces and infrasted are properly funded. And as the first-theorem. online census, it's easier than ever. Learn more theorem.





2020CENSUS.GOV

# **Subcommittees**

- Public Relations and Media
- Language
- Rural Outreach
- Business
- K12
- NAU
  - NAU will have multiple on campus subcommittees







# What is within your circle of influence?





6 2020CENSUS.GOV



## **Questions?**









## Flagstaff - Coconino County Community Census Team Fall 2019 Progress Report

Every ten years, the decennial Census surveys U.S. communities to determine our Nation's population, establishing the baseline on which representation in government and federal funding will be allocated for the following decade. Recognizing the significance of the decennial Census to our growing region, the City of Flagstaff and Coconino County began partnering in March 2018 to make sure our community gets a complete count in the 2020 Census.

This effort began with commitments from the City and County, and the formation of a Complete Count Committee, called the Community Census Team, in 2018. Coconino County and City of Flagstaff each agreed to put forward \$150,000 in funding for FY's 2019 and 2020. In addition, other community partners were asked to join the team, and make inkind contributions to the Committee's efforts. During the next year, over 20 local and regional organizations joined the team, becoming active partners in its outreach efforts.



Figure 1: Census team intern, Carmen Sanchez, at a Festival of Science early childhood event

The Community Census Team works alongside the United States Census Bureau (USCB). In the last 18 months, team members form the City and County staffs have participated in a Local Update of Census Addresses (LUCA), Participant Statistical Areas Program (PSAP) and New Construction Update. The team meets on a monthly basis and is developing a community outreach strategy that would include local media, events, social media, and participation by local partner agencies. In support of that development, Northern Arizona University's School of Communications engaged their Public Relations seniors in Spring 2019 in conducting research and developing a strategy for communicating Census information to NAU students.

On April 1, 2019, the County and City put out a joint proclamation declaring a Day of Action to officially kick-off Census outreach in the community. The Community Census Team hired a part-time Census Event & Volunteer Coordinator to assist in organizing events and community involvement, starting with a Census 2020 float in the Annual Greater Flagstaff Chamber of Commerce 4<sup>th</sup> of July Parade. A volunteer intern from NAU has also been brought onto the team. The City of Flagstaff is working to convert the volunteer into a federal-work study soon.

In the late summer of 2019, the team began forming sub-committees to address outreach to particular hard-to-reach demographics. Sub-Committees for Public Relations and Media Language Outreach, Rural Outreach, and Homeless Outreach have begun meeting, and K-12 outreach, and Business Outreach will start meeting before the end of the year. The team also formed a set of sub-committees to work on a variety of issues for Outreach to NAU students.

The team is also sharing information on recruiting for Census enumerators with partners and assisting the Census in connecting to potential employees. The week of October 21, the Census launched a nationwide recruitment effort and held an in-person recruitment events throughout Coconino County, including at the Joe C. Montoya Senior Center in Flagstaff. Census Recruiting staff is sharing information on hard to fill positions, geographic diversity of applicants and targets for language skills with the team for assistance with outreach and networking for talent.

In June, the Community Census Team entered into a contract with Riester, an advertising agency that is also working with the Maricopa Association of Governments, to develop and execute a PR campaign to promote public awareness of the Census. The team is developing and refining print and promotional materials to distribute at events. The CCC had tables at the Murdoch Center Juneteenth event, the League of Women Voters' Votes for Women event, the Coconino County Fair, the CCC&Y Early Childhood STEAM Fair, NAU Family Weekend, the Western Navajo Fair, and the City of Flagstaff Indigenous People's Day Celebration.

In the fall of 2019, the Community Census Team will continue its work by finalizing our PR campaign and building a schedule of media releases and events to keep the public informed and enthused about participating in the 2020 Census. The team will continue to work through targeted sub-committees to develop outreach strategies and materials for the array of hard-to-reach populations in Coconino County.



Figure 2: Kim Musselman, Coconino County Director of Special Initiatives, watching children at the Coconino County Fair play custom districting activity

## **CITY OF FLAGSTAFF**

## STAFF SUMMARY REPORT

**To:** The Honorable Mayor and Council

From: Scott Overton, Streets Section Director

Co-Submitter: Andy Bertelsen, Public Works Director

**Date:** 10/31/2019

Meeting Date: 11/04/2019



## TITLE:

## **Museum Fire Incident and Flood Mitigation Update**

## **DESIRED OUTCOME:**

Provide the Coconino County Board of Supervisors and the City of Flagstaff City Council an update on the Museum Fire and Flooding Mitigation efforts and provide the community direction and guidance for the coming year.

#### **EXECUTIVE SUMMARY:**

The Museum Fire occurred on June 23rd in the Dry Lake Hills area. The wildfire and subsequent flooding mitigation efforts have had a tremendous impact on the community. We will review the fire incident and flood mitigation projects that have been completed to date and provide insights to the future activities. In addition, we will be providing community guidance and direction as it relates to the flood control district desires and operational objectives in the coming year.

#### **INFORMATION:**

Attached Presentation and supporting staff will be present to address questions and concerns.

Attachments: Museum Fire City County Meeting Presentation

**Minutes Attachments** 

No file(s) attached.







**Museum Flood Area** 

## **Museum Fire & Flood Area Update** Monday, November 4, 2019 Joint City Council & Board of Supervisors Meeting



## **Presentation Overview**

## Lucinda Andreani

## Coconino County Flood Control District Administrator

## **Andy Bertelsen**

**City of Flagstaff Public Works Director** 



## **Museum Fire**



**U.S. Forest Service** 





# **EOC Operations**



## **Todd Whitney**

## **Director of Emergency Management**

# County/City Emergency Operations Center

- County/City Staff in the EOC
- City/County Policy Group
  - Provided EOC Policy Guidance
- Focus Evacuation
  Communication, Media, Public
  Communication



Incident Command manages fire





# **One County Response with Statewide & Local Partnerships**

A





RESPONSE TEAM





# Flood Control District Flood Mitigation Experience



# Flood Control District Experience Applied to Museum Flood Response

- Schultz Fire and Flood Mitigation (2010 2015)
  - Over \$50 million in response & mitigation costs
- Slide Fire and Flood Mitigation (2014)
  - Over \$700,000 in response & mitigation costs
- North Schultz Flood (2018 2019)
  - About \$2 million in response & mitigation costs
- Museum Fire and Flood Mitigation (2019)
  - \$1.8 million in response & mitigation costs



## **Top Flood Risk Assessment Team**





# **COUNTYARIZONA** FLOOD CONTROL DISTRICT



## **Museum Flood Area Mitigation**

# Museum Fire = Serious Flood Risk

- Burned 1,961 acres
- Impacted the Spruce Avenue Watershed
- 52% of the watershed burned
- Of the total area burned, 53% burned severely and moderately
   = hydrophobic soils
- Much of the area is steep slopes



FLOOD CONTROL DISTRICT

# **Museum Fire Flood Impacts**

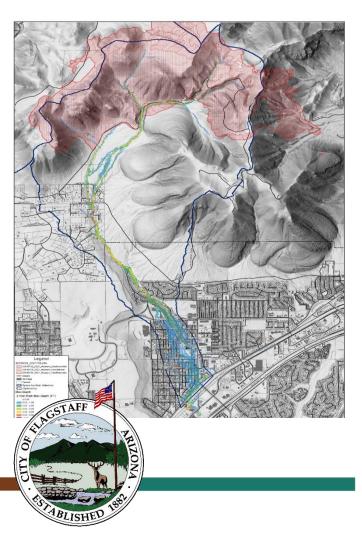
- Spruce Ave. Watershed flows through two rural developments in the County and three neighborhoods in the City of Flagstaff affecting over 400 homes and approximately 50 businesses
- Total property valuation is \$303,000,000





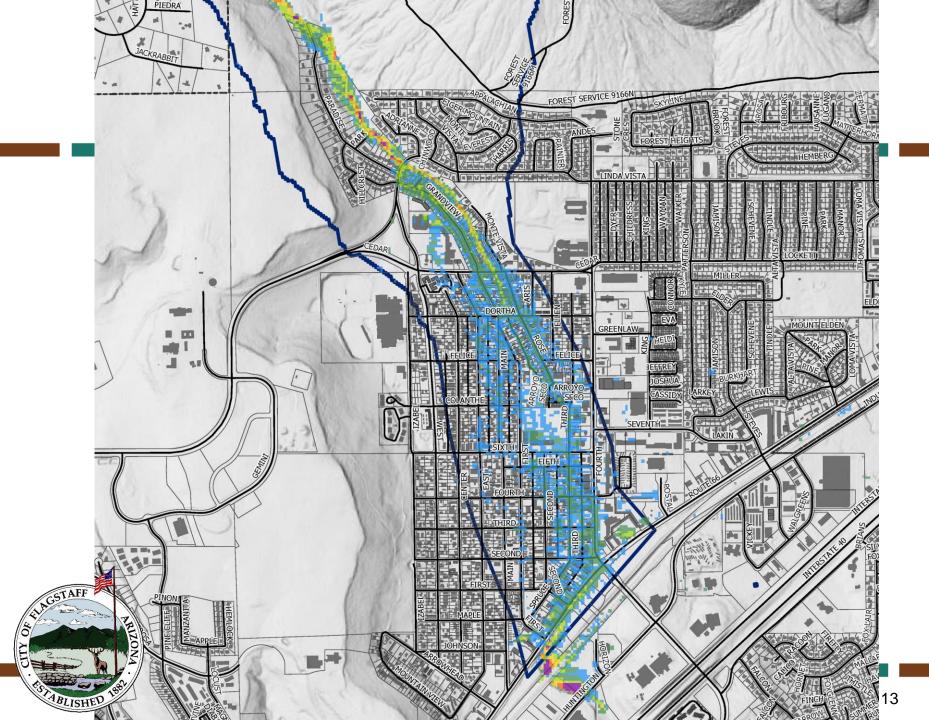


# Science-Based Approach to Flood Mitigation



- FEMA funded study identified Spruce Ave. Watershed at high risk for post-wildfire flooding
- Within 24 hours of the fire's ignition, FCD worked with JE Fuller to update flood model using the best science available
- Within 48 hours we understood hazards and developed the emergency flood mitigation measures plan
- The plan was implemented beginning with the most hazardous area and addressed the type and level of hazard in each area





# Flood Mitigation Overview

- Mitigation began with assessments of high risk properties by County and City staff persons and private engineers to determine mitigation strategies, where feasible
- Flood mitigation measures included sand bags and concrete & water barriers to mitigate impacts
- Signed Cooperator Agreements (CA) required for the installation of all flood mitigation measures
- Cleared channels of vegetation and removed debris from flood paths





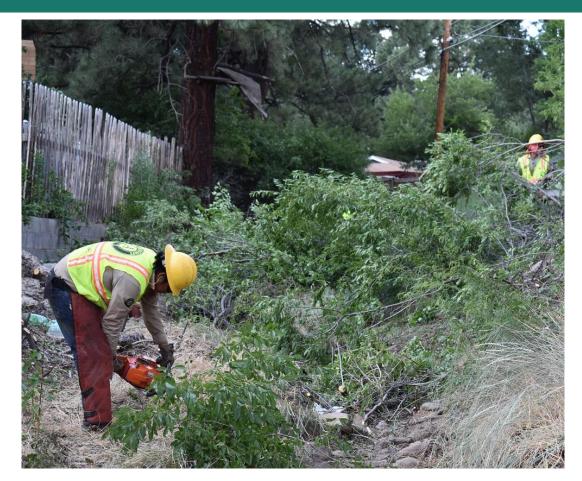
# **Flood Mitigation: Barriers**



# **Flood Mitigation: Sandbags**



# **Vegetation Removal**



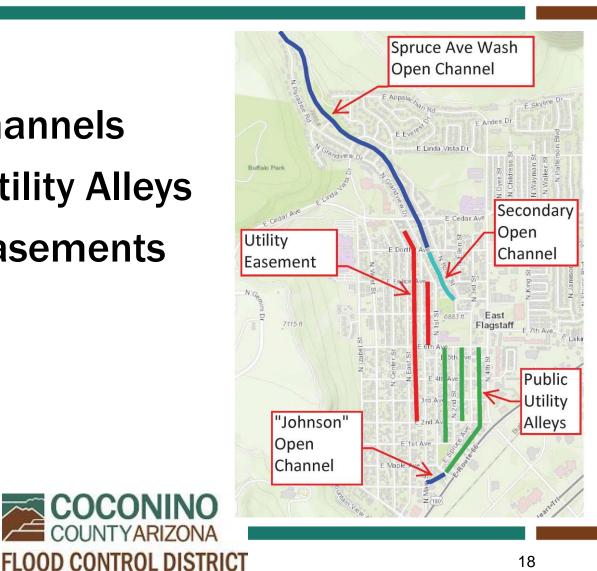




# **Vegetation Removal**

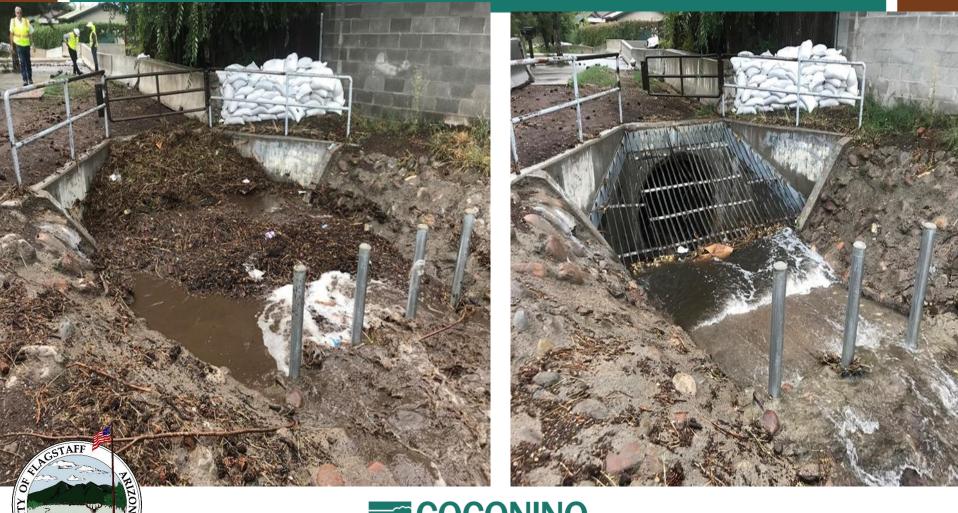
## **Miles Cleared:**

- 1.3 mi Open Channels
- 1.2 mi Public Utility Alleys
- 1.0 mi Utility Easements





## **Mitigating Flood Debris**





# **Utilities Protection**

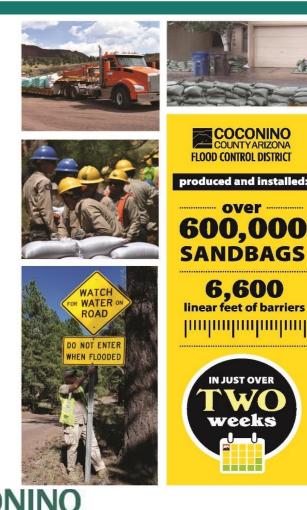


# **Museum Flood Mitigation**

COUNTYARIZONA

FLOOD CONTROL DISTRICT

- Mitigated over 400 homes and about 35 businesses in just over two weeks
- 6,600 feet of concrete & water barriers
- Over 600,000 sand bags
- 3.5 miles of debris & vegetation removal
- 15 Community Meetings
- Established Flood Monitoring System
- FCD Cost = \$1.8 Million
- City Cost = \$765,000











# The Power of Partnerships



COUNTYARIZONA

22

FLOOD CONTROL DISTRICT



# The Power of Partnerships

MORNING

ANDSCAPING, INC.



PEAKS AUDIO









An Employee-Owned Company





engineering inc.





Civil Engineering, Land Surveying & Large Format Reprographics



Shephard A Wesnitzer, Inc.

WOODSON ENGINEERING & SURVEYING









# Communications & Outreach Efforts



# **Community Meetings**

### 15 Community Meetings



## **Museum Fire Flood Area Webpage**

### www.coconino.az.gov/MuseumFire/FloodArea



FLOOD CONTROL DISTRICT





## **Information Materials** (English & Spanish)





COCONINO





oel Montalvo Little League Field the corner of Spruce St & P Avenue O way 😵

Text flagfirefund to

41444 to domate

Text volunteernow to 51555 to volunteer

MUSEUM FLOOD RISK ADVISORY July 27, 2019

Museum Flood Area Property Owners Must be Aware of the Following:

COCONINO

FLOOD CONTROL DISTRIC

- There is a strong likelihood of hazardous liash flooding as a result of the Museum Fire, The Cocorine County Flood Control District has conducted a preliminary analysis of the Food risk created by the Nuseum Fire and determined that the area shown on the map is at resk for <u>hazardous flash fooding.</u> It must be noted that flood waters can create unpredictable changes, hich can create new flood paths.
- » The Flood Control District is implementing and has implemented flood mitigation measures to reduce flooding impacts resulting from the Museum Fire. These measures, which were implemented with the consent of affected property owners wherever they were located on private land, will only handle the more regular, smaller type storm events, not large storm events. The measures implemented are based upon our best available preliminary data. The Works, The measures implemented are based upon our best available preliminary data. <u>The</u> load militation measures being implemented are not a complete protection from post-wildfire flooding but implemented as emergency response measures.
- The Flood Control District strongly encourages all property owners and occupants to take suitable precautions to mitigate flooding impacts to their properties and themselves from injury or loss of life due to flooding. The elementation of what specific precautions are suitable for your particular property is your responsibility. You may wish to consult an engineer of your choice
- > The Flood Control District strongly encourages all home owners within the expected flood The Flood Control District strongly encourages all home owners within the expected flood area to purchase flood insurance. A separate flood insurance policy through the National Flood Insurance Program (NFP) covers damage to you home and belongings caused by flooding with a specific cas on the amount of damages. Standard Innerewares insurance does NOT cover flood damage. Noise information is evaluable at <u>https://www.floodin.mit.stand</u> and at www.cocomo.az.eu/nius.eu/if Performance.
- > Within the Museum Flood Risk Area there are formal and informal drainage channels Residents and others should NOT enter these flood channels nor allow children or pets into these channels. Floodwaters may enter the neighborhoods with very little or no notice
- > Please review the map (back side of this sheet) of the Museum Flood Risk Area. This map is based on information available as of July 26, 2019.

The important information in this Notice is provided to Museum Flood Area property owners so that they can take suitable precautions to protect themselves and their properties. This Notice is intended to comply with ARS 48-3603 (J).

For more information regarding Museum Flood Area Flood Mitigation and mitigation, please visit www.coconino.az.gov/MuseumFire/FloodArea

### COCONINO FLOOD CONTROL DISTRICT

RIESGO DE LA INUNDACIÓN DEL MUSEO CONSULTIVO: 27 Julio 2019

- Propietarios de la zona de inundación del museo debe tener en cuenta lo siguiente
- Existe una luerte probabilidad de injurdadiciones pedireses resultantes del función de Musses, El Datrito de Carriel de Injurdadiciones del condido de Coconte o condigio una añías elementar del muser de la injurdadición aceso per el intendio el Muser y determinito del el de que se muestra en el mana ade en inespo de ajundadan tradiciona, Electo intense en cuelar la en una del muestra de la mundadición tendición pedicidades la del pues y demensiones en ajunctión muestra en el mana ade en tensor de ajundadición tendición de la devica en ajunctión inducción padeen terres en todos interpretectivos la que pues de energia en ajunctión inducción padeen terres en turbas en alternarias en assettantes en ajunctión inducción padeen terres en turbas en alternarias en assettantes en ajunctión inducción padeen terres en assettantes en alternarias en alternarias en ajunctión inducción padeen terres en assettantes en alternarias entres en ajunctión inducción padeen terres en assettantes en alternarias en alternarias en ajunctión inducción padeen terres en assettantes en alternarias en alternarias en ajunctión inducción padeen terres en assettantes en assettantes en ajunctión inducción padeen terres en assettantes en alternarias en alternarias en ajunctión inducción padeen terres en assettantes en ajunctión inducción padeen terres en assettantes en ajunctión inducción padeen terres en assettantes en ajunctión inducción terres entres anternarias en ajunctión inducción enter enternarias enternarias enternarias enternarias en alternarias enternarias enter
- > El Dietrich de Control de Inundiciones escli interimentando y hu implementado medida dos indiguidos de intuncionas parta metalecia los initiadados de inundicionas resultantes das incendido del Marseo. Estas medidas, que se aplicanno con el consertimiento de los propriadanse detacidados dordedurantes que se concitandas no terrarios privades, solo es amantegiaría los eventos de tormenta lus en dedias interestrátivas pasa pagalense, no los grandes eventos de tormenta lus en edicas interestas privades danse termentas de sensortas de tormenta de nuestros privades de los privades de los de tormentas de sensortas de tormentas de nuestros en grandes. preliminares disponibles. Las medidas que se están aplicando después de los incendios forestales no es la suficiente protección en contra de la inundación, solo es una implementación que se ha tomado como una medida rápida de emergencia
- > El Distrito de Control de Inundaciones alienta encarecidamente a todos los propietarios y El orsano de Confront els precauciones adenta inclandadante de la linguista de la companiera si ons proprietanos y ocupantes a tomar las precauciones necesarias para mitigar los linguistos de lundaciones en sus propiedades y a si mismos contra lesiones o péridas de vidas debido a linundaciones. La defurmitación de ou de procauciones esporticas es orquieren para au propiedad es su responsabilidad. Es posible que desee consultar a un ingeniero de su elección.
- El Diemo de Costrol de humidaciones silienta a todos los propidations de inviendes extreto de lám de la humidación sepredar a compren segurar accesaria in mandecinantes. La poblicas de segure costra inundaciones ofrecidans a transide del Porgrama Necional de Segure contra Inundaciónes (PMP) cubern dirár os unes a protemenarias cuasivados por intransidores nos un tope específico sobre la cartícica de daños. El esgure estindar sars propetarias <u>M0</u> extre las daños cuasascio de su ruindaciones y ruin de información paras propetarias <u>M0</u> extre las daños cuasascio de su ruindaciones y para misma danos da sobre el en específico sobre la cartícular de las paras estinantes paras para de las portunidas paras propetarias <u>M0</u> estina de las paras estinantes paras paras estinantes paras paras estinantes paras paras estinantes paras para https://www.floodsmart.gov/ y en www.coconino.az.gov/MuseumFiro/FloodArea

Dentro de la zona de riesgo de inundaciones del Museo hay canales de drenale formales e Lentro de la zona de riesgo de inundaciones del museo nay canales de drenaje form informales. Los residentes y otros NO deben entrar en estos canales de inundación que los niños o masoctas en estos canales. Las inundaciones pueden entrar en los ón ni permitir vecindarios con muy poco o ningún aviso.

Por favor, revise el mapa (en el reverso de esta hoja) de la zona de riesgo de inundaciones del Museo. Este mapa se basa en la información disponible a partir del 26 de julio de 2019.

La información importante de este Aviso se proporciona a los propietarios de la zona de nundación del Museo para que puedan tomar las precauciones adecuadas para protegerse a si mismos y a sus propiedades. Este Aviso está destinado a cumpiir con ARS 48-3603 [J].

Para obtener más información sobre la mitigación y mitigación de inundaciones en el área de iones del Museo, visite www.coconino.az.goviMuseumFire/FloodArea



Aztec Shvet cerca Frances Short Poud

a.MuseumFireInfi

@.CoconinoCount

& CoconinoNF



Sitio Web de Inundación: www.coronino.uz.gov/museunline/l'orderes Correo Electronico de Inundacion: musconfloedir forêcecernino.az.gov Centre de Llomador: (\$250-215-250) Correo Electronico de Incendio: 2019.nuscumértireur.com Sitio Web Incidente: inciweb.nwog.gowincident/i150 Sitio Web del Condudo Intre Swew enconino az esy-Sitie Web del Ciudad: www.flagstaff.az.gov Sitio Web del Busque Nacional: <u>https://www.fs.usda.gov/cesemine</u> Sitio Web del Human hims //wildlux/and/nearable retrout/activit/entrol&man Lote de fierra al Norte de 2625 N Gras St. (Survivies Horns



CoroninoCounts @CitvofFlagstaff



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@CitvofFlagstaff @ Muscom FireInfo & USForest ServiceCoconfi

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### FLOOD CONTROL DISTRICT Recent Communication

### to Residents & Property Owners







October 29, 2019

### Dear Museum Flood Area Resident.

On benaf of the Coconion Courty Flood Control District (FCD) and the City of Flagstaff (City), we would like to again thank you and your neighbors for your cooperation and community spirit during the Museum File, and especially during installation of emergency flood mitigation measures in your neighborhood. More than 600,000 sandhags and 6000 linear feet of barriers were installed throughout the Museum Flood area by the FCD's team in just over two weeks. This was a monumental undertaking, one which would have been impossible without your support.

As we move from the driest monscon season on record into autum, we want to provide you with a biel udate regarding the importance of keeping these emergency flood mitigation measures in place as well as some possible long-term on-forest flood mitigation projects that are underway or being considered for the Maeum Flood race. Please note that, for the reasons outlend below, the FCD and City strongly recommend keeping your flood mitigation in place through the 2020 monscon season.

### Emergency Flood Mitigation Measures

First and foremost, it's very important to understand that the threat of flooding is real and that your property will remain a thigh its is post-widther flooding for several years. Although we are fortunate to have not experienced any flooding this summer, it is equally important to note that the National Weather Service classified the 2019 monoson season as the driest since record keeping begin in 1980 (as recorded at the Flagdard Arport). The San Francisco Peaks area received only about 20 percent of its normal rainfail amount during this monsoon season. The Museum Fire Burn Scar received only about 25 - 37 inders of rainfail cluming the 2019 monsoon season. Which is about 35 percent of normal monscon precipitation. In addition, rainfail that did fail on the burn scar was light to moderate in character and therefore did not create significant post-widther flooding downstream.

Given this very dry monsoon season, some residents might wonder if they need to keep their emergency flood mitigation measures in place. They should. Those considering removing their measures also need to consider the following:

- Because of the historically dry 2019 monsoon season, the flood mitigation measures in your neighborhood were not tested against anything close to normal rainfall conditions.
- The placement of food mitigation in your neighborhood was based on science and the lessons learned from the Schultz and Silde fires. The science included a previously conducted FENAfunded County-wide post-widther flood risk study, which created a flood model for the Spruce Avenue watershed (the watershed impacted by the Museum Fire). This watershed was identified





29 de octubre 2019

Estimado/a residente en el área de immdación del Incendio Museo,

En nombre del Distrito de Control de Inutudaciones del Conducto de Coontro y la Cituda de Hagstaff, nos gustafia agradecelle de nueva susted y a sus veriens per su cooperación y espínitu communican durante el interativo del Museo, y especialmento durante la instalación de medidas de mitigación contra intendaciones en su verindratio. Més de 000,000 sesso de auren y 6 o00 metros lineates de barrens plucten instalacións en el area de intradución per el equipo del Distrito de Control de Intudaciones en peco más de dos semanas. Esta fue un proyecto enorme, que no habria sido posible sin su apoyo.

A medida que nos adentramos en el otório con la seca temporada de monzores en registro, queremos oficererle una breve actualización acente a de la importancia del mantener medidas de mitigación en su projectada, sal como algunas de las soluciones que están en nurcha o que están siencio considerados para el Museo área de

Tenga en cuenta que, por las nazones expuestas obajo, <u>el Distrito de Control de Inundaciones del Condado y</u> la Ciudad recomisedan encarecidamente maatener su miligación de inundaciones (sacos de arena) en su lugar durante la temporada de monzones 2020.

### Medidas de Mitigación de Inundaciones de Emergencia

En primer lugar, es may importante entender que la anenaza de inutráciones es real y que su propiedad parmanecerá en alto riesgo de inutacioión después de incendos forestalos durante vartes años. Aunque tenemos la surte de no haber experimentado ninguna inutación este vertano, es igualmento importante recordar que el Servicio Metorológico Nacional elastifició la temportada de monzenes 2019 como el más seco desde que compro el registro en 1886 como se registro en el Acorpareto de Elapstarfi.

El árca dal Pico de San Francisco recibio solo alredador dal 20 pre ricitato da su cantidad normal de lluvia durante esta temporada de monzones. La cleaniz de experiendura de fuspo recibió solo alredador de 2.5 – 3.7 migradas da lluvia durante la temporada de monzones 2019, que es alredador del 35 per el ento de la la precipitación normal del monzon. Además, las precipitaciones que experon sobre la electriz de quemaduras eran de carácter ligen o amóderado y por los trats, ou ceraren una inundacion signi festiva.

Aunque esta temporada de monzones muy seco, algunos residentes podrían preguntarse si necesitan mantener sus medidas de mitigación de inundaciones de emergencia en su lugar. <u>Deberían</u> Aquellos que consideran la posibilidad de diminar sus recidas también deche neure en eutra lo siguiente:

- Debido a la temporada de monzones históricamente seco 2019, las medidas de mitigación de inundaciones en su vecindario no se probaron contra nada cercano a las condiciones normales de lluvia.
- Ea colocación de la mitigación de inundaciones en su vecindario se basó en la ciencia y las lecciones aprendidas de los incendins de Solutor y Silde. La ciencia incluyé un estudio de rização de inundación después de un incendio strestál financiado por FRMA, que creó un medido de inundación para la cuenca.



# 2019 "Non-Soon"

- Threat of flooding is real properties will remain at high risk for post-wildfire flooding for several years
- The National Weather Service classified the 2019 monsoon season as the driest since record keeping began in 1898 (as recorded at the Flagstaff Airport).
- The San Francisco Peaks area received only about 20 percent of its normal rainfall amount during this monsoon season.
- The Museum Fire Burn Scar received only about 2.5 3.7 inches of rainfall during the 2019 monsoon season, which is about 35 percent of normal monsoon precipitation.
- Rainfall that did fall on the burn scar was light to moderate in character and therefore did not create significant post-wildfire flooding downstream.





## Flood Mitigation Recommendations

- The FCD and City strongly recommend keeping your flood mitigation in place through the 2020 monsoon season
- We do not yet know how winter snow or spring rain runoff potential impacts... a rain-on-snow event could cause very serious flooding in the Museum Flood Area.





### **Flood Mitigation Recommendations**

- Removal of any section of mitigation from an individual property may compromise the effectiveness of this system and could result in adverse flooding effects to adjacent properties – the private property owner can be held responsible for any damage
- The City team is working to create a modified snow removal operations strategy that will help to minimize the impact of installed mitigation on snow removal operations. The County is committed to assisting the City with those operations if needed.





# **Keep your Sand Bags!**

- Please Do Not Dispose of Your Sandbags!
- Disposal of sandbags is owner's responsibility.
- Sandbags cannot be put in City trash cans or placed curbside for City bulk pickup.
- Sandbags can be taken to the Cinder Lake Landfill or if they are in good shape, returned to the sandbag station at 2625 N. King Street.
- Protect Your Sandbags! Cover them with plastic









# Going Forward: Long-Term Mitigation



## **On-Forest Measures**

- FCD secured USFS grant to construct onforest measures
- FCD working with large private property owner and NRCS to potentially construct similar measures on private parcel



# Linda Vista Culvert Emergency Protective Measures

- Location: Just north of the Cedar Safeway on E. Linda Vista Dr. between N. Paradise Rd. and south of N. Adrianne Way at the E. Linda Vista Dr. and the Spruce Ave. Wash drainage crossing
- Rationale: The Spruce Avenue Wash Watershed conditions drastically changing as a result of the Museum Fire and the existing stormwater inlet capacity being undersized for the conditions of the altered watershed.





# Linda Vista Culvert Emergency Protective Measures

- Goal: This project will increase the capacity of the culvert at Linda Vista Drive and the Spruce Avenue Wash allowing more stormwater through the City stormwater infrastructure and reducing the amount of stormwater on City roadways.
- Status: City is currently reviewing the 95% phase of the Design & Construction of the culvert is planned for early December





# **Continuing Vigilance**

- Continue Flood Monitoring
- Communication slated for June 2020 in preparation for 2020 Monsoon Season
- Questions or concerns email:

museumfloodinfo@coconino.az.gov







### COUNTYARIZONA FLOOD CONTROL DISTRICT DISCUSSION

