

## **WORK SESSION AGENDA**

**CITY COUNCIL WORK SESSION  
TUESDAY  
MAY 10, 2016**

**COUNCIL CHAMBERS  
211 WEST ASPEN AVENUE  
6:00 P.M.**

**1. Call to Order**

### **NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION**

*Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this work session, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).*

**2. Pledge of Allegiance**

**3. Roll Call**

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

MAYOR NABOURS  
VICE MAYOR BAROTZ  
COUNCILMEMBER BREWSTER  
COUNCILMEMBER EVANS

COUNCILMEMBER ORAVITS  
COUNCILMEMBER OVERTON  
COUNCILMEMBER PUTZOVA

**4. Preliminary Review of Draft Agenda for the May 17, 2016, City Council Meeting.\***

*\* Public comment on draft agenda items may be taken under "Review of Draft Agenda Items" later in the meeting, at the discretion of the Mayor. Citizens wishing to speak on agenda items not specifically called out by the City Council for discussion under the second Review section may submit a speaker card for their items of interest to the recording clerk.*

**5. Public Participation**

*Public Participation enables the public to address the council about items that are not on the prepared 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 at the meeting 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 to have an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.*

6. **2016 Wildfire Preparedness Briefing**
7. **Presentation on Flooding and Low Impact Development In Flagstaff**
8. **Discussion:** Revisions to Title 7-04, *Municipal Solid Waste Collection Service*, of the Flagstaff City Code. **(SEE ITEM 14-B ON THE MAY 17, 2016, DRAFT AGENDA FOR BACKGROUND INFORMATION)**
9. **Review of Draft Agenda Items for the May 17, 2016, City Council Meeting.\***  
  
*\* Public comment on draft agenda items will be taken at this time, at the discretion of the Mayor.*
10. **Public Participation**
11. **Informational Items To/From Mayor, Council, and City Manager; future agenda item requests.**
12. **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 \_\_\_\_\_, 2016.

\_\_\_\_\_  
Elizabeth A. Burke, MMC, City Clerk

## CITY OF FLAGSTAFF

### STAFF SUMMARY REPORT

**To:** The Honorable Mayor and Council  
**From:** Paul Summerfelt, Wildland Fire Manager  
**Date:** 05/02/2016  
**Meeting Date:** 05/10/2016



**TITLE:**  
**2016 Wildfire Preparedness Briefing**

**DESIRED OUTCOME:**  
 Information only

#### **EXECUTIVE SUMMARY:**

The annual Wildfire Preparedness Briefing will present information on current/forecast conditions, staffing and resource availability, and actions being taken in a variety of areas to prepare for, and respond to, wildfires this summer in the greater Flagstaff area.

Presenters will include City of Flagstaff (Fire and Police), Coconino County Emergency Management, and the US Forest Service – Coconino National Forest.

#### **INFORMATION:**

##### **COUNCIL GOALS:**

- 2) Ensure Flagstaff has a long-term water supply for current and future needs
- 3) Provide sustainable and equitable public facilities, services, and infrastructure systems in an efficient and effective manner to serve all population areas and demographics
- 7) Address key issues and processes related to the implementation of the Regional Plan
- 11) Ensure that we are as prepared as possible for extreme weather events.

##### **REGIONAL PLAN:**

Environmental Planning & Conservation – Vision for the Future: *In 2013, the long-term health and viability of our natural resource environment is maintained through strategic planning for resource conservation and protection.*

Policy E&C.3.3 – Invest in forest health and watershed protection measures.

Policy E&C.6.1 – Encourage public awareness that the region's ponderosa pine forest is a fire-dependent ecosystem and strive to restore more natural and sustainable forest composition, structure, and processes.

Policy E&C.6.3 – Promote protection, conservation, and ecological restoration of the region's diverse ecosystem type and associated animals.

Policy E&C.6.6 – Support collaborative efforts for forest health initiatives or practices, such as the Four Forest Restoration Initiative (4FRI), to support healthy forests and protect our water system.

Policy E&C.10.2 – Protect, conserve, and when possible, enhance and restore wildlife habitat on public land.

**Attachments:**    PowerPoint



# **WILDFIRE PREPAREDNESS BRIEFING**

*May 10, 2016*



***Paul Summerfelt – FFD  
Cpl Brad Conway – FPD  
Robert Rowley – CCEM  
Duane Tewa – USFS***

***... a system's approach***

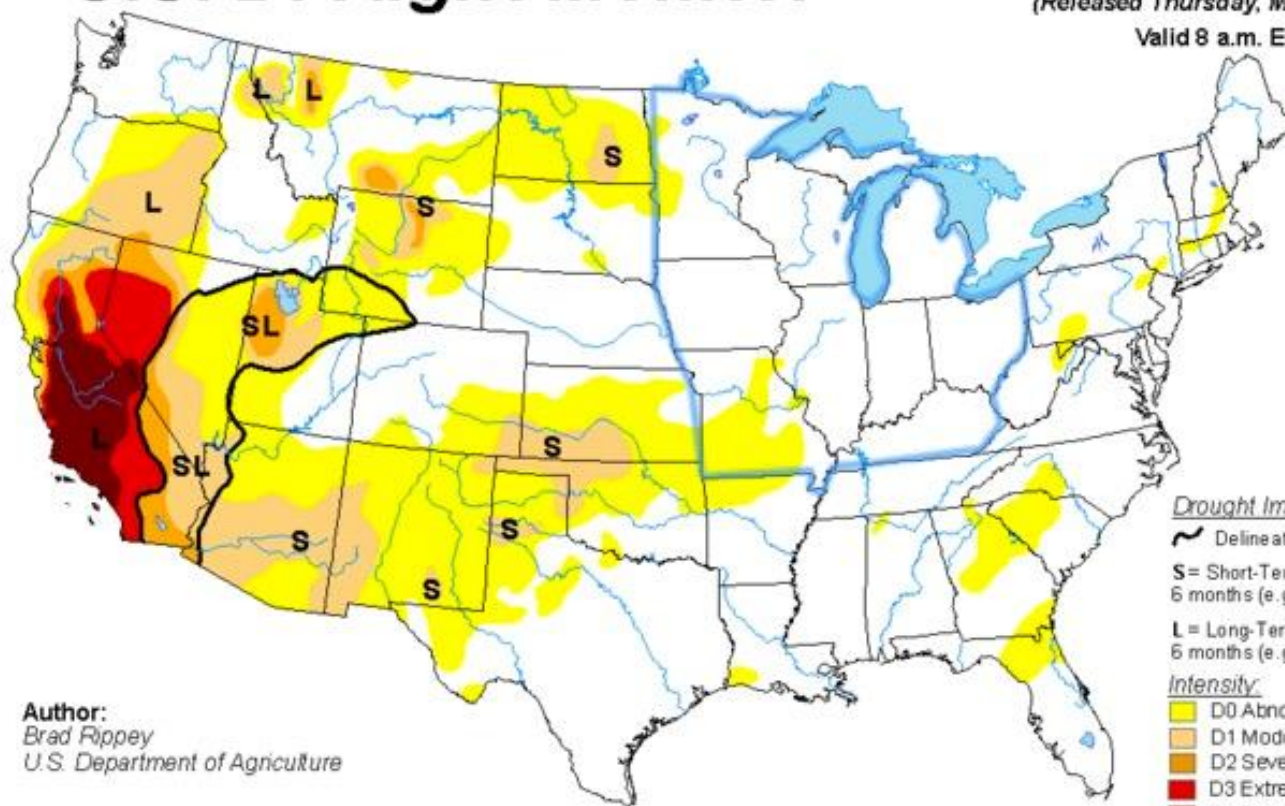


# U.S. Drought Monitor

March 29, 2016

(Released Thursday, Mar. 31, 2016)

Valid 8 a.m. EDT



**Author:**  
Brad Rippey  
U.S. Department of Agriculture

## Drought Impact Types:

~ Delineates dominant impacts

**S** = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

**L** = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

## Intensity:

**Yellow** D0 Abnormally Dry

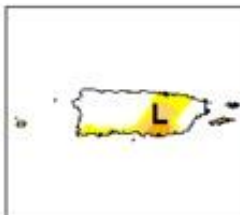
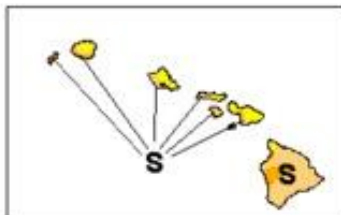
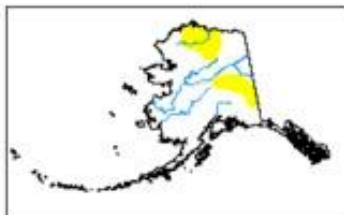
**Orange** D1 Moderate Drought

**Dark Orange** D2 Severe Drought

**Red** D3 Extreme Drought

**Dark Red** D4 Exceptional Drought

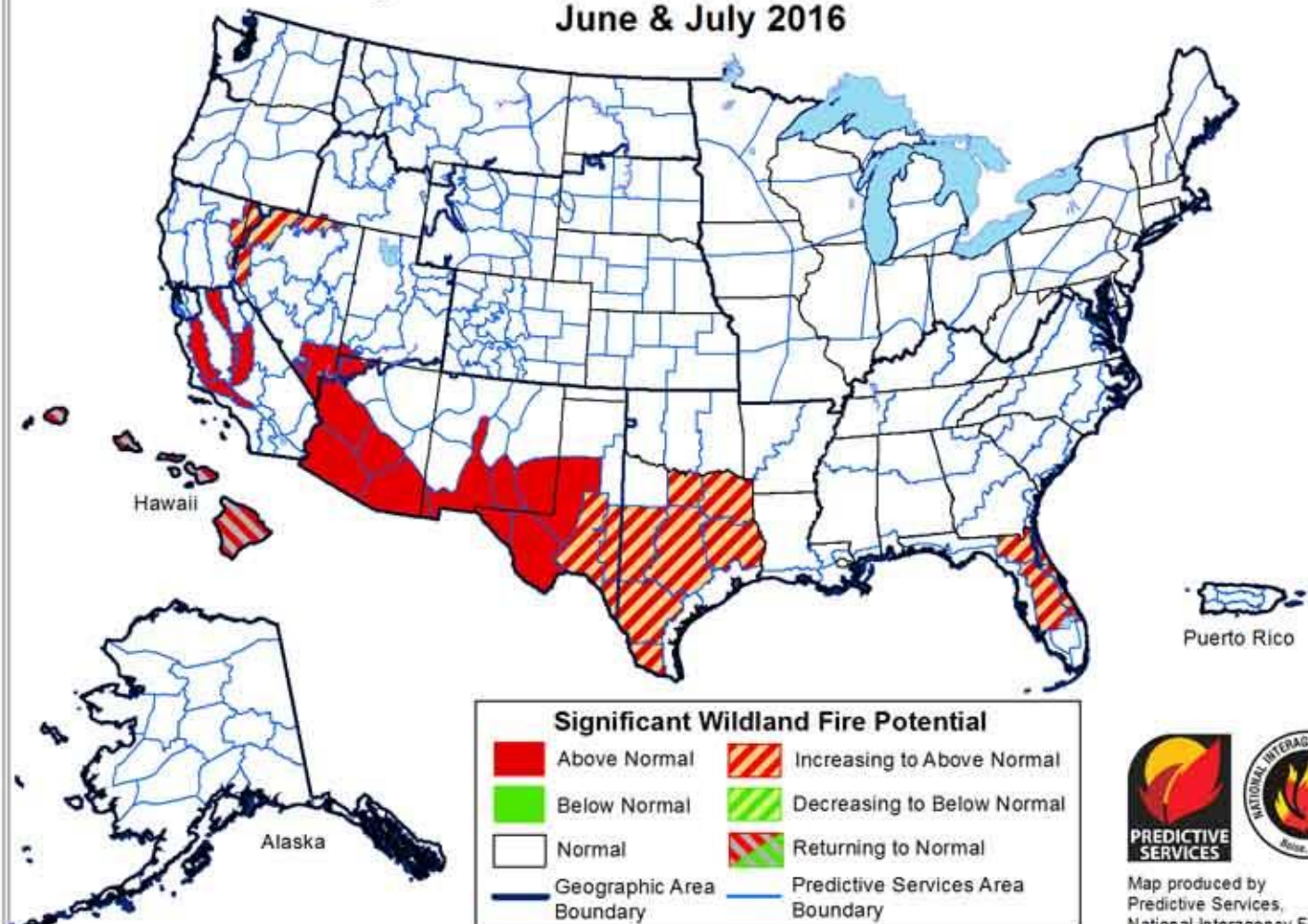
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

# June and July Outlook

## Significant Wildland Fire Potential Outlook June & July 2016

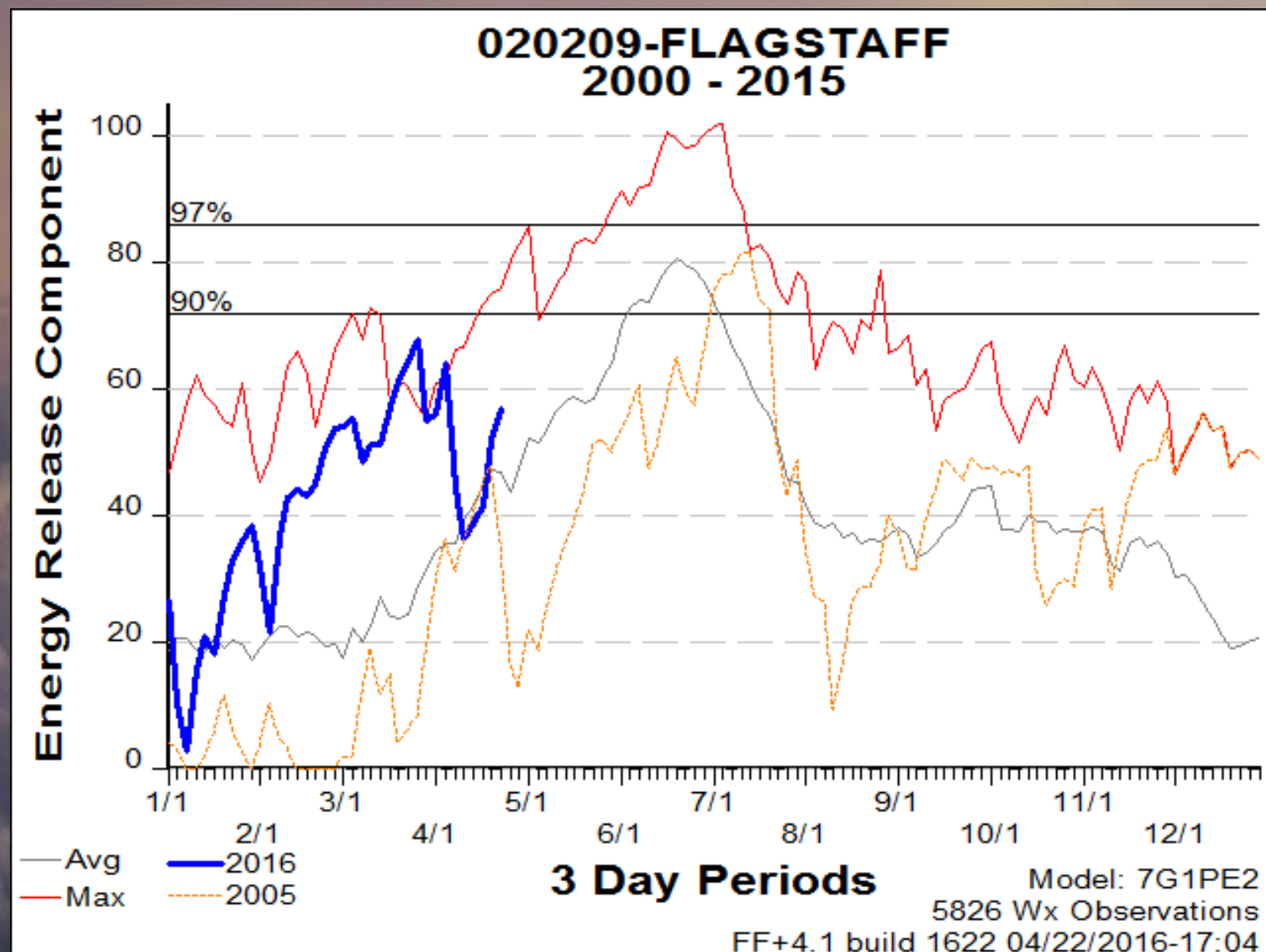


Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur. Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions. Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.



Map produced by  
Predictive Services,  
National Interagency Fire Center  
Boise, Idaho  
Issued April 1, 2016  
Next issuance May 1, 2016

# Flagstaff Area ERC Value







# **2016 Focus Areas**

- **Prevention:**

- ***Shelter presentations & Woods Watch***
- ***Joint patrols w/PD***

- **Preparedness:**

- ***Wildfire Preparedness Day - May 7<sup>th</sup>***
- ***Firewise Landscaping Contest - May 18<sup>th</sup>***
- ***Restrictions & Closure Plan***
  - ❖ ***Weekly coordination calls & Preparedness Updates***

## **Fire Restrictions In Effect**



**No Fires**



**No Smoking**



**No BBQ's**  
(Charcoal or Wood)



[www.flagstaff.az.gov](http://www.flagstaff.az.gov)

Per Flagstaff City Code Section 503-0914001 & IFC 307.1.1



# **2016 Focus Areas**

- **Preparedness (cont):**

- ***Training: AZ Wildfire Academy, local/regional efforts, and Annual Refresher***

- **Hazard Mitigation:**

- ***Forest Treatments: Thinning, debris disposal, rx fire***

- **Response:**

- ***Line & City Crew 1***
- ***Severity Unit(s)***

- **Recovery: as required**



# COLLABORATION & PARTNERSHIPS

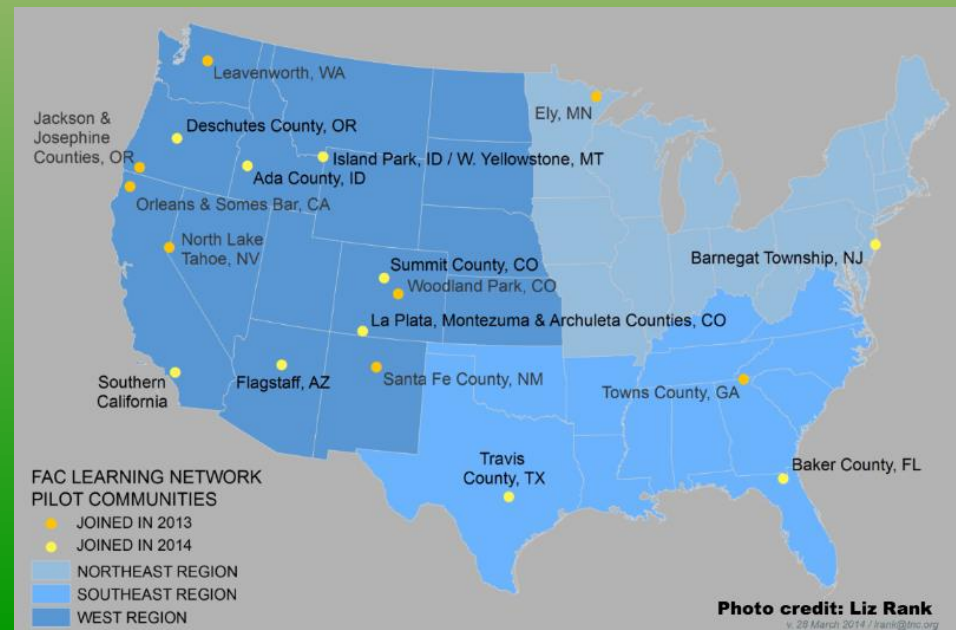


**FLAGSTAFF WATERSHED  
PROTECTION PROJECT**



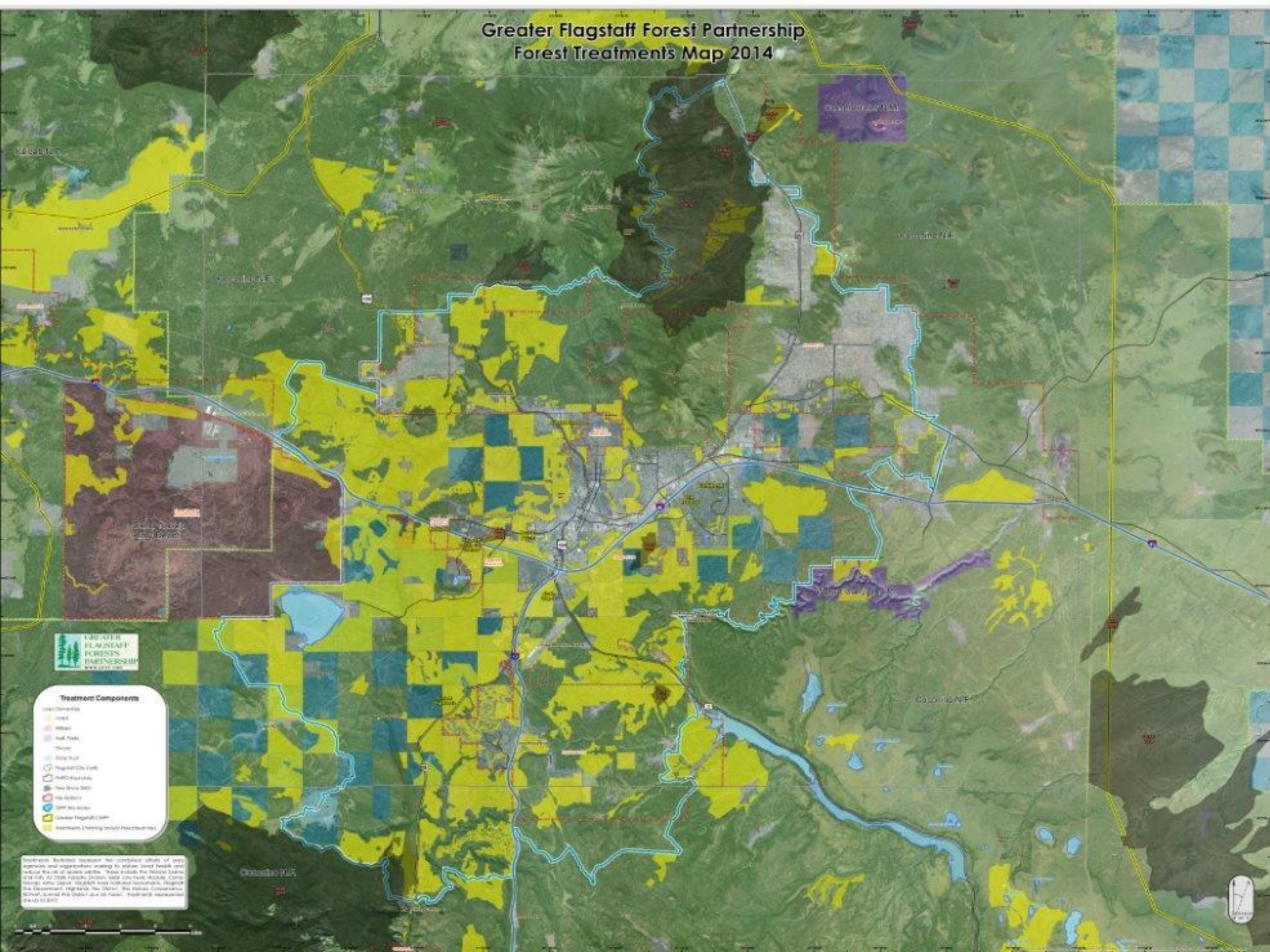
***Fire Adapted Communities →  
&***

***Fellow Fire Depts  
(Ashland OR, North Lake Tahoe CA,  
Austin TX, Boulder CO, Santa Fe NM)***





# Greater Flagstaff Forest Partnership Forest Treatments Map 2014



## Treatment Components

- Thinning
- Fuel Reduction
- Other Treatments
- Private Land Boundary
- National Forest Boundary
- BLM Boundary
- Other Land Boundary
- Greater Flagstaff Partnership Boundary
- Watershed Thinning and/or Prescribed Fire

Treatments described represent the combined activity of one or more agencies and organizations working to reduce forest fuels and reduce the risk of severe wildfire. These include the National Forest and BLM, AZ State Wildlife Division, other state parks, private landowners, other local, regional and national landowners, Flagstaff Department of Public Works, and the Flagstaff Community Foundation. For more information, visit the Greater Flagstaff Partnership website at [www.gffp.org](http://www.gffp.org).





# Law Enforcement Fire Prevention Patrols

- Proactive patrols typically start in May. This year, the PD began preparing for forest patrols in April
- Patrols begin when weather becomes more moderate due to a “Necessity” clause in the city camping ordinance
  - *Fire danger is lower during (most) winter months due to precipitation*



# Law Enforcement Fire Prevention Patrols

## Patrol Efforts

- Early morning patrols in the wooded areas of Flagstaff to address illegal camping and campfires
- Night time flights looking for illegal campsites and campfires begin in coordination with fire restrictions
  - *Fire assets are directed to the area by personnel on the flight*
- The Justice Assistance Grant will be used to pay overtime costs associated with evening flights
  - *1 officer daily for 2 - 3 hours*



Evening air patrols conducted with  
CCSO



# Law Enforcement Fire Prevention Patrols

## Woods Watch Volunteers

- The Woods Watch program will be coordinated with the Coconino County Sheriff's Office again this year
  - *First class training date to be determined.*
  - *Woods Watch volunteers aid law enforcement by reporting violations of forest closure restrictions*



# Annual PFAC Exercise

- Completed on April 22<sup>nd</sup> at Camp Navajo
- Exercised operational coordination and communications
- 18 different agencies participated



# Annual PFAC Exercise



# County Wildfire Defense Ordinance

- Adopted by BOS August 2015
- Enacted by BOS at recommendation by Emergency Management
- Done in coordination with area partners
- Three Stages of restrictions
- Complete ordinance available on County website ([www.coconino.az.gov](http://www.coconino.az.gov))

# Emergency Management Website

Coconino - Emergency M. x

coconino.az.gov/index.aspx?NID=207

Apps ★ Bookmarks Intranet - Home Google Yahoo! Imported From IE NWS Flagstaff CoconinoCOOP.com Arizona Division of Emergency Management Suggested Sites Web Slice Gallery Other bookmarks

+myConnections: Engage your community - connect to news, events and information you care about. [View more information...](#) Sign In

Search


Have a Plan  
Emergency Kit  
Stay Informed  
Volunteer

NOTIFY ME  
REPORT AN ISSUE  
EMPLOYMENT  
COUNTY MAPS  
ONLINE BILL PAY  
COMMUNITY VOICE

Home > Government > Departments > Emergency Management

## Emergency Management

### Are you ready for fire season?



Woody Fire (1).jpg

The Northern Arizona fire season will soon be upon us. In the event of a wildfire, don't get caught without a family emergency plan.

The following resources can help you get started:

[Coconino County Wildfire Defense Ordinance](#)

[Coconino County Evacuation Procedures Brochure](#)

[Read about emergency kits, how to make a family communication plan, and more.](#)

## CONTACT US

**Robert Rowley**  
Emergency Manager  
219 E. Cherry Ave.  
Flagstaff, AZ 86001  
[Map](#)  
Ph: (928) 679-8310

Ruthanne Penn  
Assistant to the  
Emergency Manager  
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CERT Coordinator  
Ph: (928) 679-7133

Mark Christian  
Program Coordinator  
Ph: (928) 679-8322

Sonya Pedersen  
Volunteer  
Ph: (928) 679-7133

Ashleigh Makuch  
Intern  
Ph: (928) 679-8322

Can't find what you're looking for? [Contact Us](#) and let us know.

**Hours**  
Monday - Friday  
8:00 AM - 5:00 PM

## QUICK LINKS

[VIEW ALL](#)

- 2015 (draft) County Multi-Jurisdictional Hazard Mitigation Plan

Ask me anything

4:23 PM 4/28/2016



# Fireworks

ARS 36-1606 allows cities, towns, and counties to prohibit sales and use of permissible consumer fireworks only when state or federal Stage 1 fire restrictions are in effect



# Emergency Operations Plan

- New Multi-Jurisdictional EOP from BOLDPlaning
- Single EOP with all participating jurisdictions as planning partners
- Continuously updated throughout the year
- Same format as COOP

# CodeRED

- 15,585 CNE Sign-Ups
- Over 25,000 contacts in City of Flagstaff
- New smart phone launcher app

# CodeRED

WEATHER WARNING

## Automated Weather Warnings

May 10<sup>th</sup>, 2015 to Present

- 32 Flash Flood Warnings
- 61 Severe Thunderstorm Warnings
- 6 Tornado Warnings
- 12,759 calls, texts, and emails

# CodeRED

WIRELESS EMERGENCY ALERTS





# Coconino National Forest Fire and Aviation Management Program

## ► **2016 Chief's Letter of Intent...**

### ► ***"Life First..."***

#### ► ***"Everyone Goes Home Safely Everyday"***

- ***Implement strategies and tactics that commit responders only to operations where and when they can be successful, and under conditions where important values actually at risk are protected with the least exposure necessary while maintaining relationships with the people we serve.***

# Coconino NF

## Restoration Efforts

- ▶ **Forest Plan Revision**
- ▶ **Four Forest Restoration Initiative**
- ▶ **Flagstaff Watershed Protection Project**
- ▶ **C. C. Cragin Reservoir**



FLAGSTAFF WATERSHED  
PROTECTION PROJECT



# Wildland Fire Dispatch

- ▶ **Coconino National Forest**
- ▶ **Navajo and Hopi**
- ▶ **Flagstaff and Verde Valley Monuments**
- ▶ **PFAC and the Greater Flagstaff Area**







# Fire Prevention Strategies

- **Education**
- **Patrols**
- **Severity**
- **Restrictions**







# Wildfire Detection

- ▶ **Lookout Towers**
- ▶ **Aerial Detection**
- ▶ **Public**





# Engines and Crews (USFS)

- ▶ **Engines (12)**
- ▶ **Crews (3)**
- ▶ **Water Tenders (4)**
- ▶ **Dozers (2)**
- ▶ **Misc. Overhead**





# National Ground Resources

- ▶ **60 Interagency IMT**
- ▶ **100 Interagency Hotshot Crews**
- ▶ **10,000 Firefighters**
- ▶ **900 Engines**
- ▶ **Partners**
- ▶ **International**







# National Air Resources

- ▶ **21 Large/Very Large Fixed-Winged Air tankers**
- ▶ **Single Engine Air Tankers**
- ▶ **113 Exclusive Use Helicopters**
- ▶ **Fixed Winged Fleet**



# Questions ?



## **CITY OF FLAGSTAFF**

### **STAFF SUMMARY REPORT**

**To:** The Honorable Mayor and Council  
**From:** Chris Kirkendall, Stormwater Manager  
**Date:** 04/28/2016  
**Meeting Date:** 05/10/2016



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#### **TITLE:**

**Presentation on Flooding and Low Impact Development In Flagstaff**

#### **DESIRED OUTCOME:**

Information only

#### **EXECUTIVE SUMMARY:**

In 2015, a Future Agenda Item Request was brought forward by Councilmember Oravits to have staff provide a presentation on Low Impact Development in Flagstaff, and majority of Council agreed to move this item forward. The second (Layout) and third (Detail) attachments have been provided at the request of Councilmember Oravits.

The Stormwater Section at the City of Flagstaff is tasked with implementation of multiple programs related to stormwater. One of the major responsibilities is to provide support to the City's Development Engineering Section through the permitting review process which is where the LID (Low Impact Development) program is implemented. This Staff Summary will provide an overview of the Stormwater program focusing on Low Impact Development.

#### **INFORMATION:**

LID implementation was phased in over several years beginning in February of 2009 as a voluntary program. In March of 2010 the one half inch retention requirement was implemented. In March of 2011 the one inch of retention requirement was made mandatory for development within the City.

Development increases runoff by removing vegetation and installing impervious surfaces. This work increases the stormwater volume and pollution from a site. LID is a form of retention that holds stormwater volume onsite resulting in a reduction to volumetric flooding. LID also provides a water quality benefit through filtration and reduced erosion.

Volumetric flooding is caused by existing infrastructure's inability to pass a given storm volume, which results in a backup or lake. It is like a slow drain or bath tub that is backed up. LID directly reduces this type of flooding by holding stormwater volume onsite. This volume either infiltrated back into the groundwater table or is slowly released over a long period of time. LID delays the costly replacement of undersized downstream infrastructure by reducing damage caused by flooding.

LID reduces erosion and provides filtration of runoff which reduces nonpoint pollution. Runoff entering LID systems is filtered through vegetation and bio-retention soils removing pollutants from the water. This water quality benefit supports the goals of the City's MS4 permit.

New development is currently required to retain one inch of runoff from new impervious surfaces onsite and release this volume in 24 to 36 hours. Detention of the two-year storm is waived with implementation of LID retention.

Without LID volumetric flooding in areas like Southside and Continental will continue to increase. Maintenance cost to the public to replace undersized infrastructure in flooded areas will continue to increase. Further nonpoint pollution and erosion will increase from developed sites. Basically LID retention provided a mechanism for grows to mitigate impacts from growth.

***COUNCIL GOALS:***

- 3) Provide sustainable and equitable public facilities, services, and infrastructure systems in an efficient and effective manner to serve all population areas and demographics
- 4) Develop and implement guiding principles that address public safety service levels through appropriate staff levels
- 6) Provide a well-managed transportation system
- 7) Continue to implement the Flagstaff Regional Plan and focus efforts on specific plans
- 9) Improve the economic quality of life for Flagstaff through economic diversification, and by fostering jobs and programs that grow wages and revenues
- 11) Ensure that we are as prepared as possible for extreme weather events

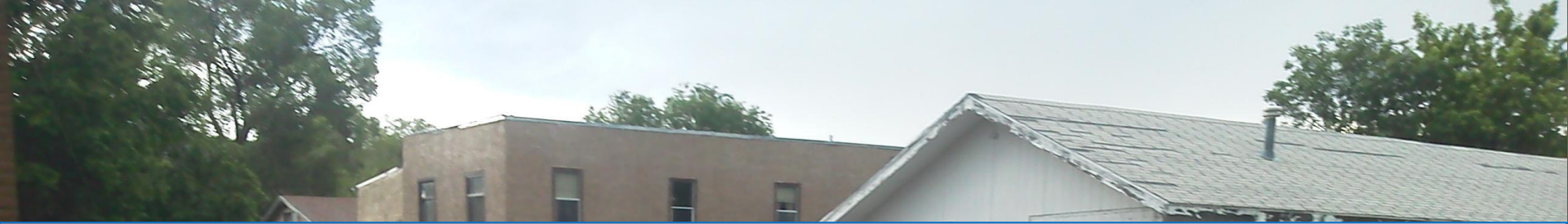
***REGIONAL PLAN:***

?Policy WR.5.7. Support healthy watershed characteristics through implementation of practices, consistent with the City of Flagstaff Low Impact Design Manual, that improve flood control and flood attenuation, stormwater quality, and water sustainability; increase groundwater recharge; enhance open space quality; increase biodiversity; and reduce land disturbance and soil compaction.

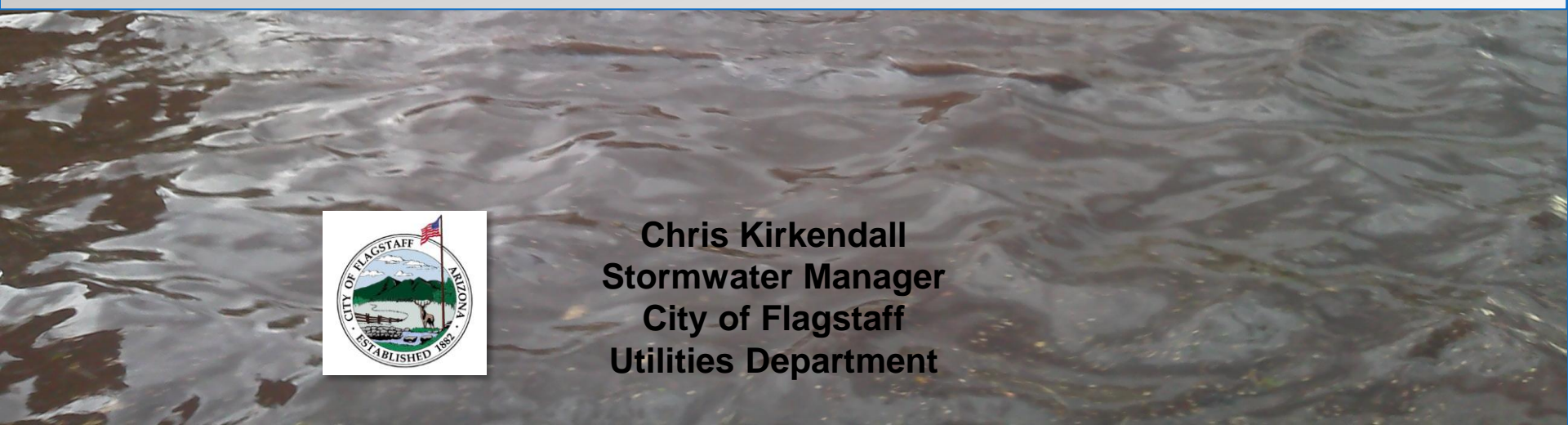
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**Attachments:**     [power point presentation](#)  
                              [Layout](#)  
                              [Detail from LID Manual](#)





# Flooding and Low Impact Development In Flagstaff



**Chris Kirkendall**  
**Stormwater Manager**  
**City of Flagstaff**  
**Utilities Department**



# Stormwater Programs

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- Capital Improvements
- Drainage Maintenance
- Floodplain Management
- Drainage Investigations
- Development Permitting

# Stormwater Responsibility

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## Regional Plan Policy

- Policy WR.5.7. Support healthy watershed characteristics through implementation of practices, consistent with the City of Flagstaff Low Impact Design Manual, that improve flood control and flood attenuation, stormwater quality, and water sustainability; increase groundwater recharge; enhance open space quality; increase biodiversity; and reduce land disturbance and soil compaction.



# LID Implementation History

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- February 2009 retention requirement adopted
- March 2010 1½" of retention required
- March 2011 1" of retention implemented



# LID Goals

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- Reduce impacts from development
  - Increased Runoff
  - Increased Pollution
- LID
  - Reduces volumetric flooding
  - Decreases Pollution



# Volumetric Flooding

**Infrastructure unable to pass storm volume**



Route 66 at Clay Ave.



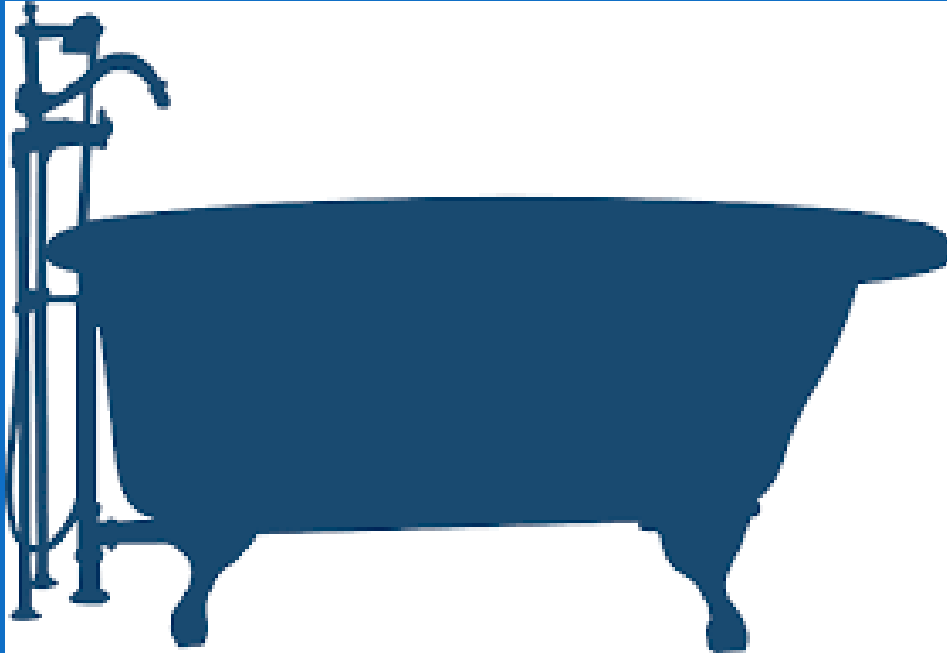
Lake Continental

**Bathtub Effect**



# Bathtub Effect

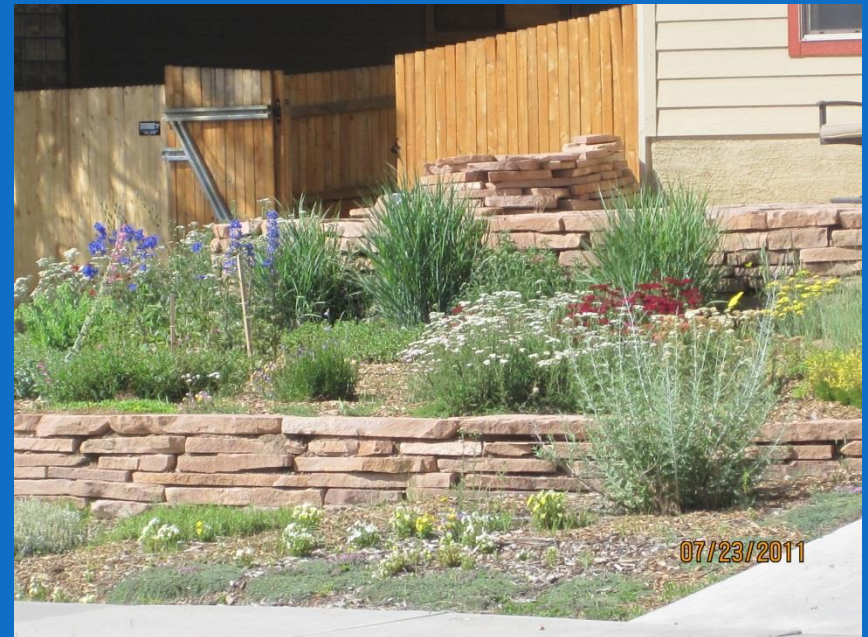
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# Benefit of LID Water Quality

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- Reduces nonpoint pollution
- Provides filtration
- Recharges groundwater
- Tied to MS4



# Benefit of LID Flood Reduction

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- LID mitigates new development impacts on volumetric flooding
- Delays for costly infrastructure investment

# Development Requirements

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## Requirements:

- Mitigate 1" of runoff from new impervious surfaces
- Eliminates 2yr storm detention requirement



# Stormwater impacts without LID



Bow & Arrow

- Increased volumetric flooding
- Increased replacement of undersized infrastructure
- Increased non-point pollution

# Questions?

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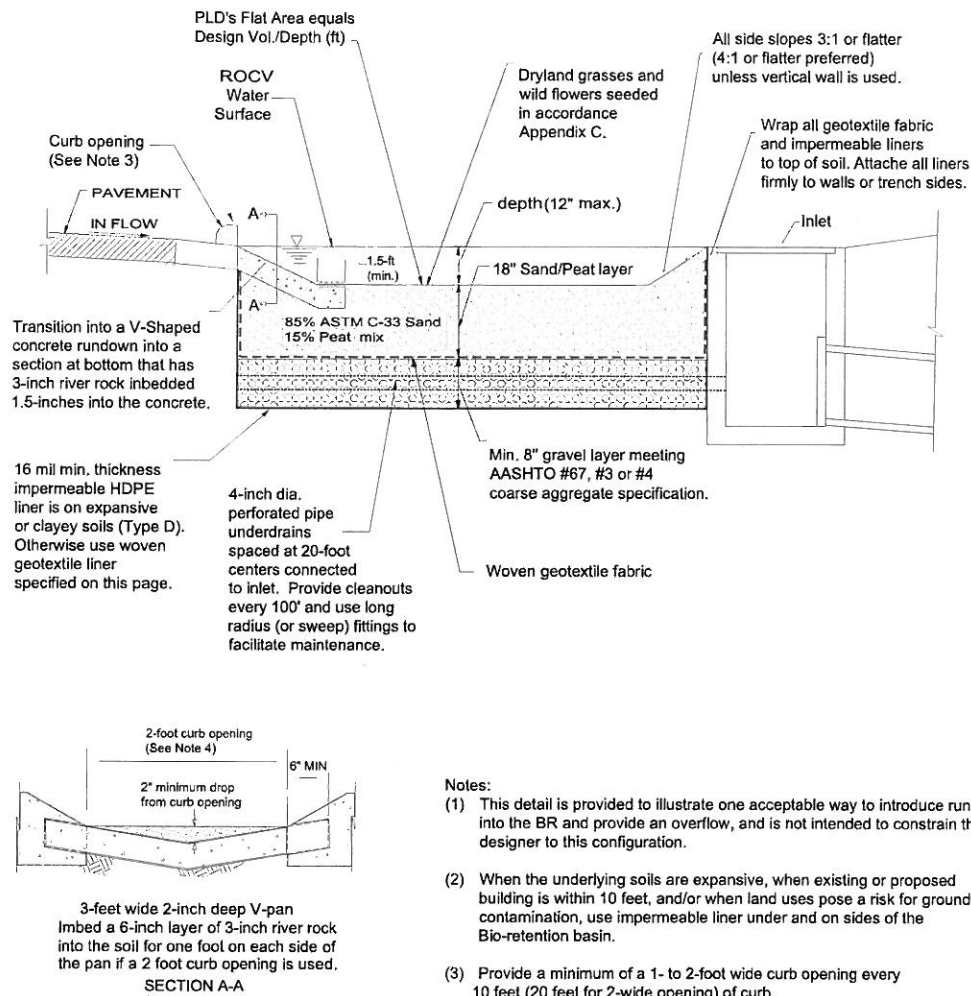




*1/2" RETENTION*



*1" RETENTION*



**Figure 3.12 - Bio-Retention – Typical Sections**



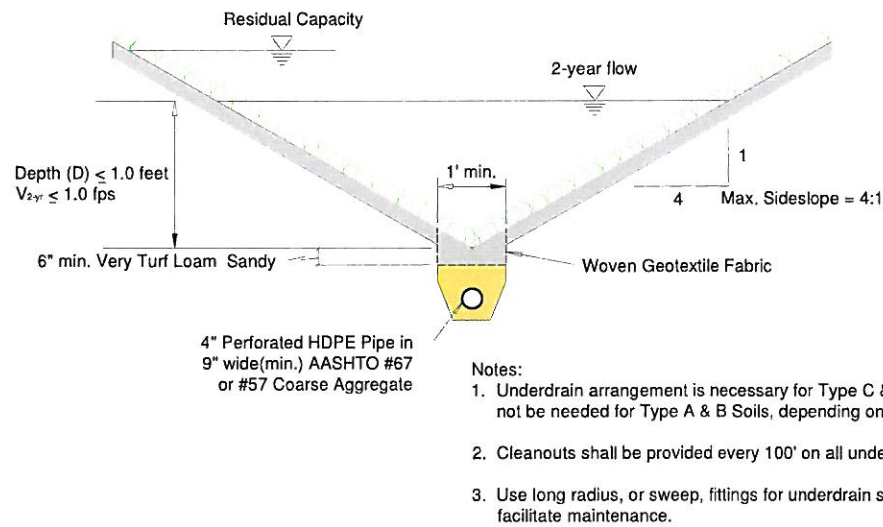
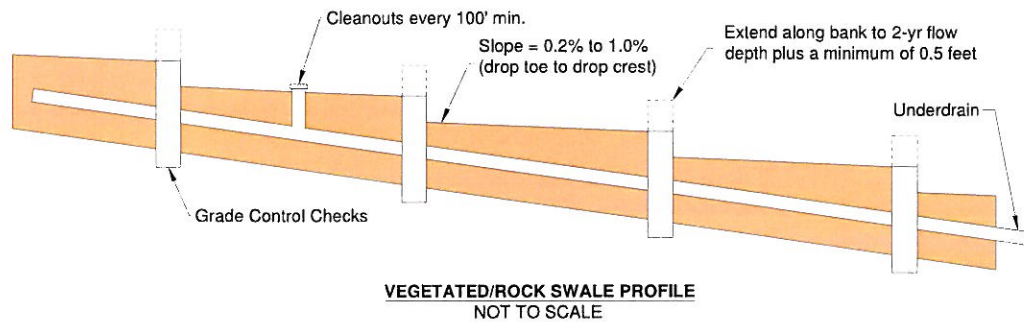
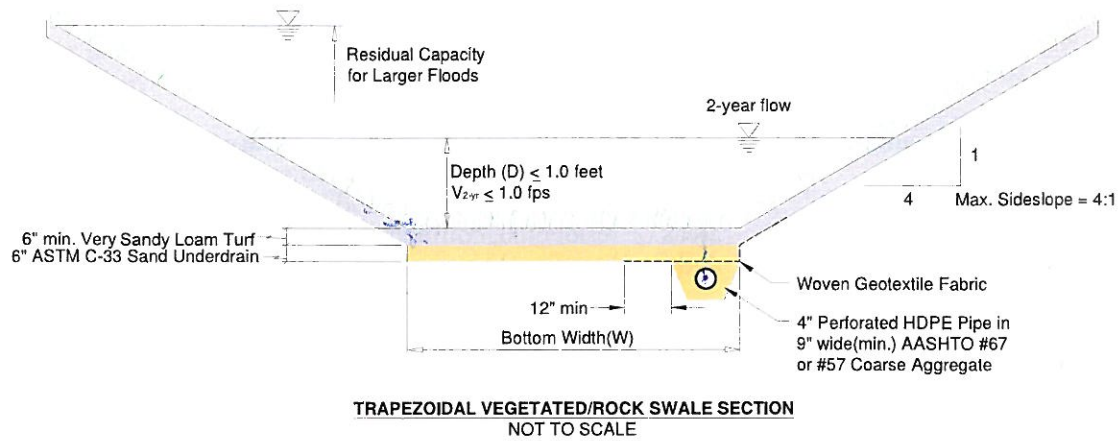


Figure 3.2 - Vegetated/rock swale – Profile and Sections  
(Based on drawing from UDFCD)