

Onion Creek Floodplain Changes

Public Meeting February 27, 2017



Meeting Overview

- Nuevo Estudio para Zonas de Inundación
 - ¿Por qué?
 - ¿Dónde?
 - ¿Cuándo?
- ¿Cómo lo afectara?
 - Seguridad ante Inundaciones
 - Reglas de Urbanización
 - Seguro de Inundaciones
- Preguntas
- Discusion en grupos



Onion Creek Floodplain Study

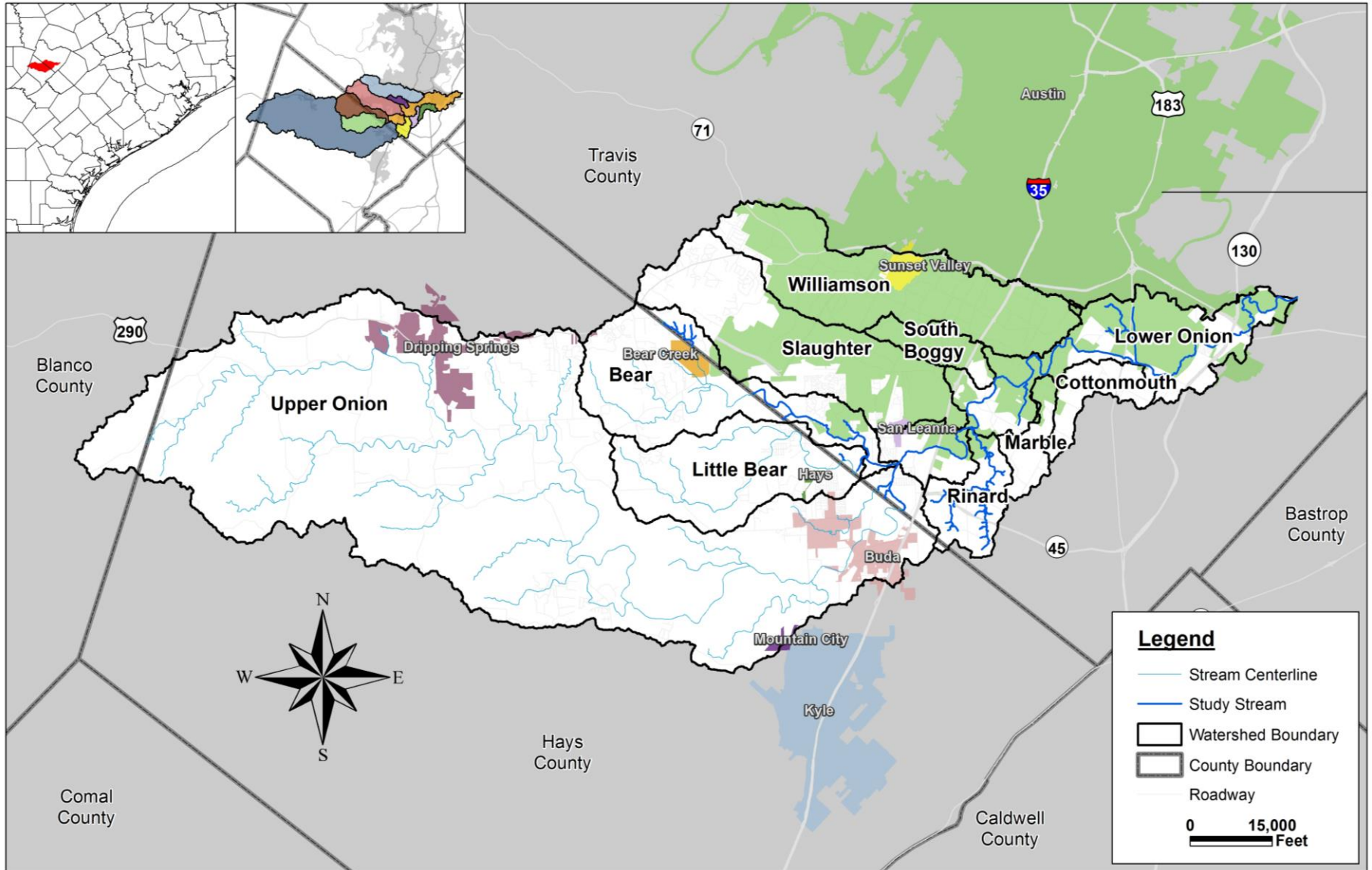
- Inicio en 2014, despues de la inundación en Halloween del 2013
- Meta: Entender e intentar mitigar el riesgo a inundaciones
 - Seguridad pública
 - Herramientas de regulacion mejoradas
 - Mitigacion de inundaciones
- Productos Finales
 - Modelos y Mapas de Zonas de Inundación
 - Alternativas de mitigación de inundaciones
- Costo total del proyecto de aproximadamente \$ 1.25 millones de dolares

Floodplain Study Basics

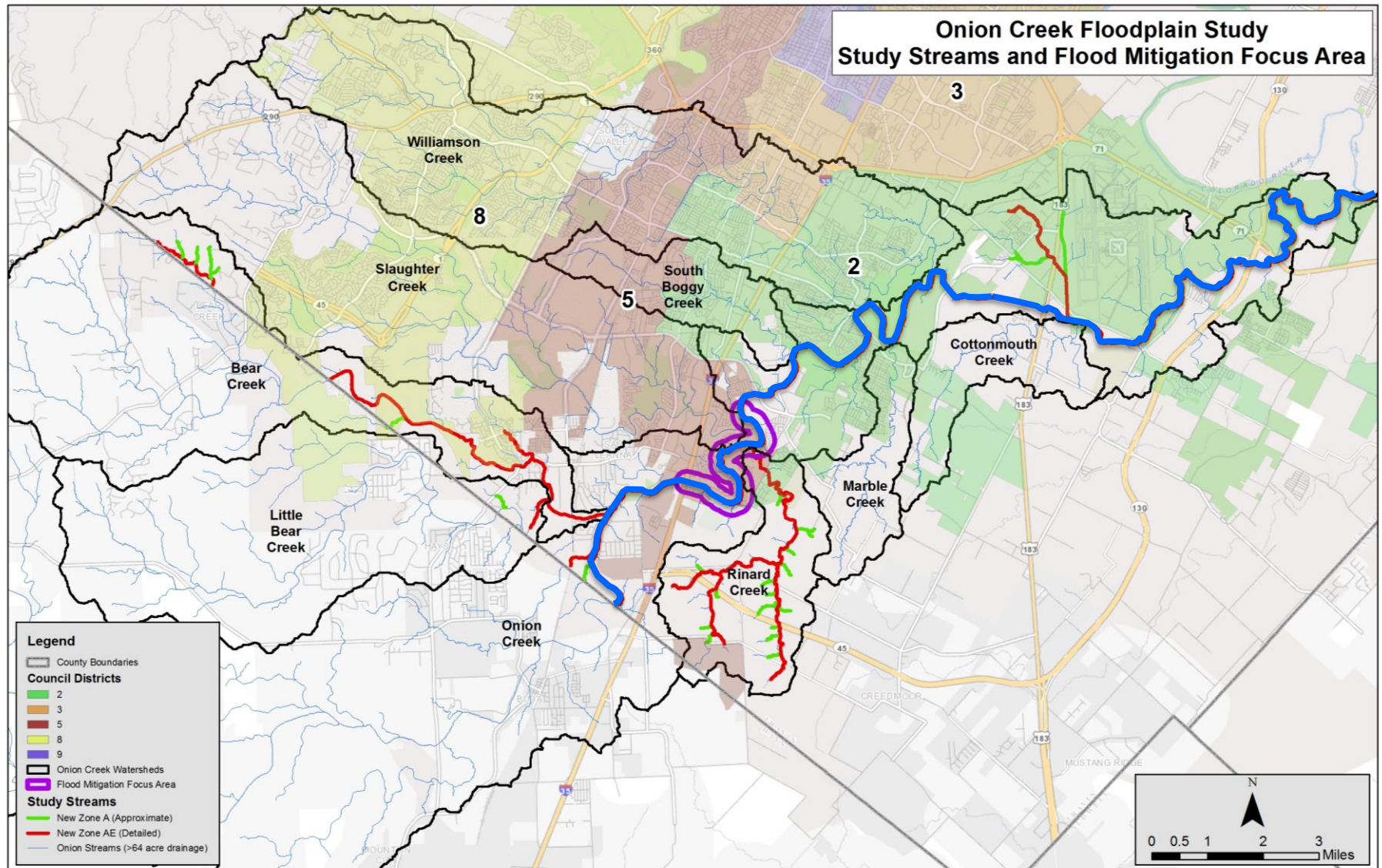
- 4 partes del estudio
 - Medición
(¿Tamaño del riachuelo?)
 - Hidrología
(¿Cuánta agua?)
 - Hidráulica
(¿Que tanto inundara el agua?)
 - Mapeo
(¿A dónde ira el agua?)



Onion Creek Watershed



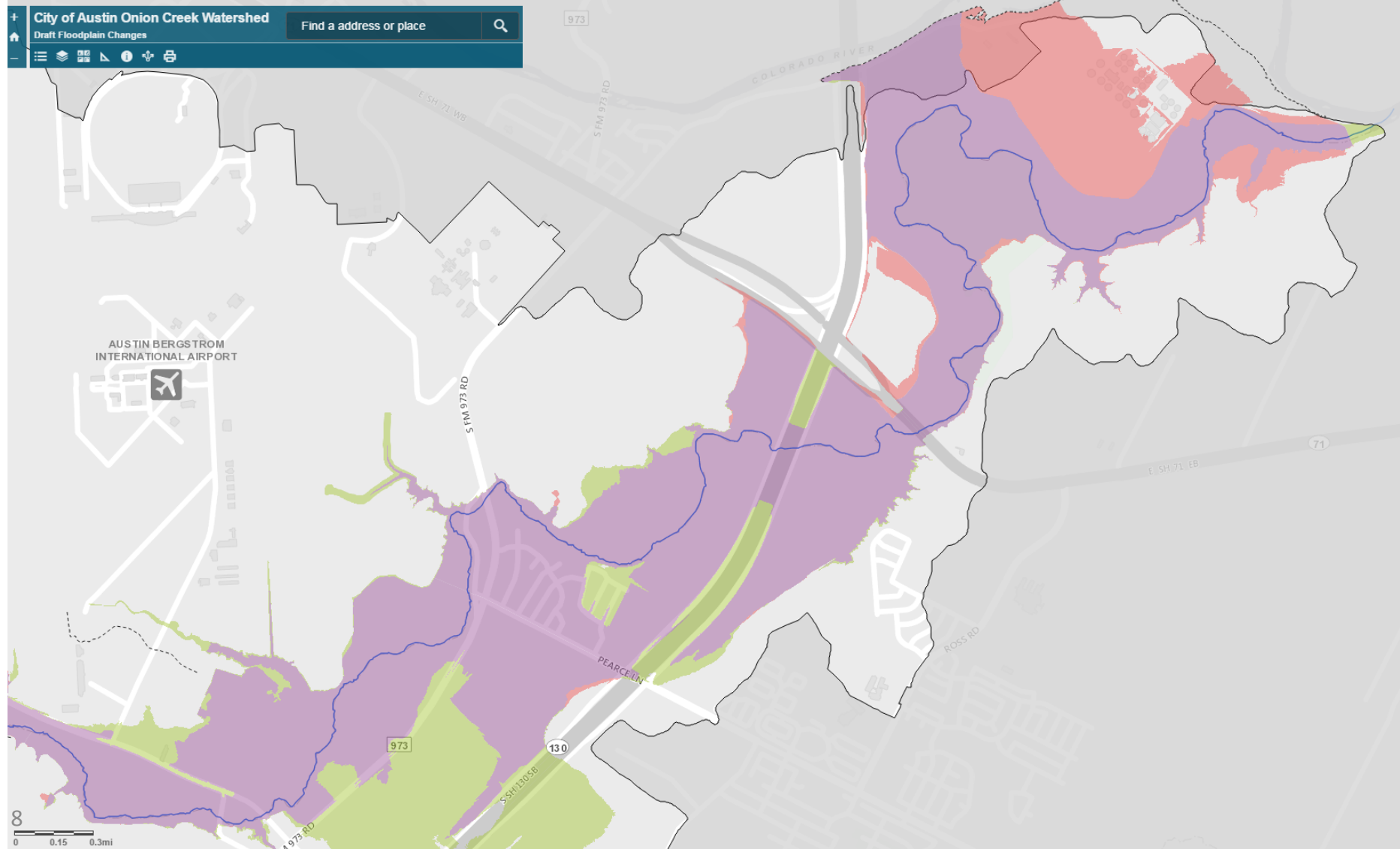
Scope of Work – Floodplain Study



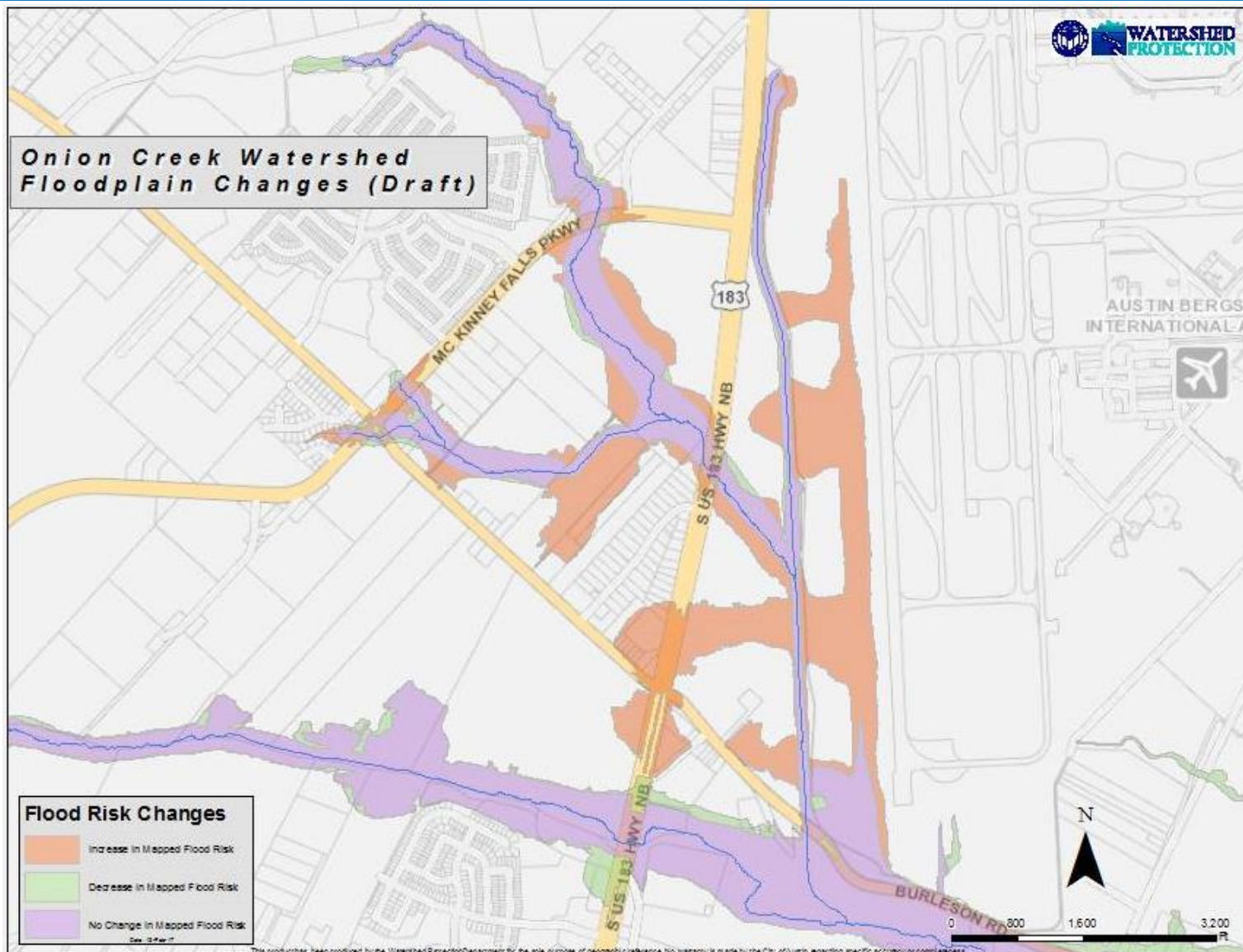
Fully-developed vs. FEMA floodplains

- Hay dos tipos de mapas de zonas de inundación en Austin
 - Los mapas de FEMA se imprimen en los Mapas de Tasas para Seguros de Inundación (FIRM, por sus siglas en inglés), y muestran el riesgo tal como existe hoy. Se utilizan para establecer las tasas de seguro contra inundaciones.
 - Los mapas de zonas de inundación “completamente urbanizados” muestran el riesgo de inundación en base en el desarrollo futuro. Estos mapas son utilizados por la ciudad para regular la urbanización, y asegurar que los nuevos edificios se mantendrán protegidos de las inundaciones durante la urbanización.

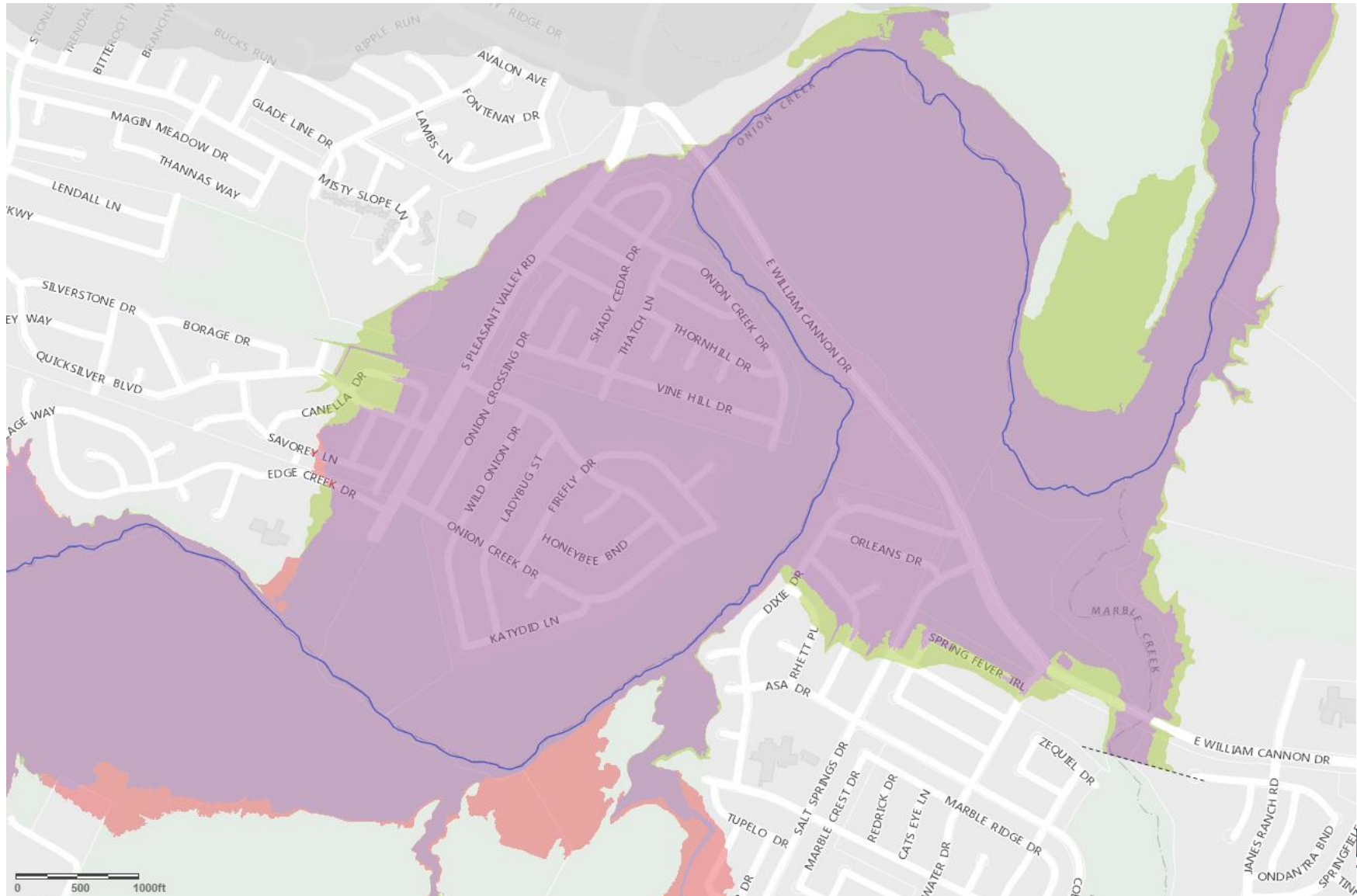
Floodplain Changes – Burleson Road to Colorado River



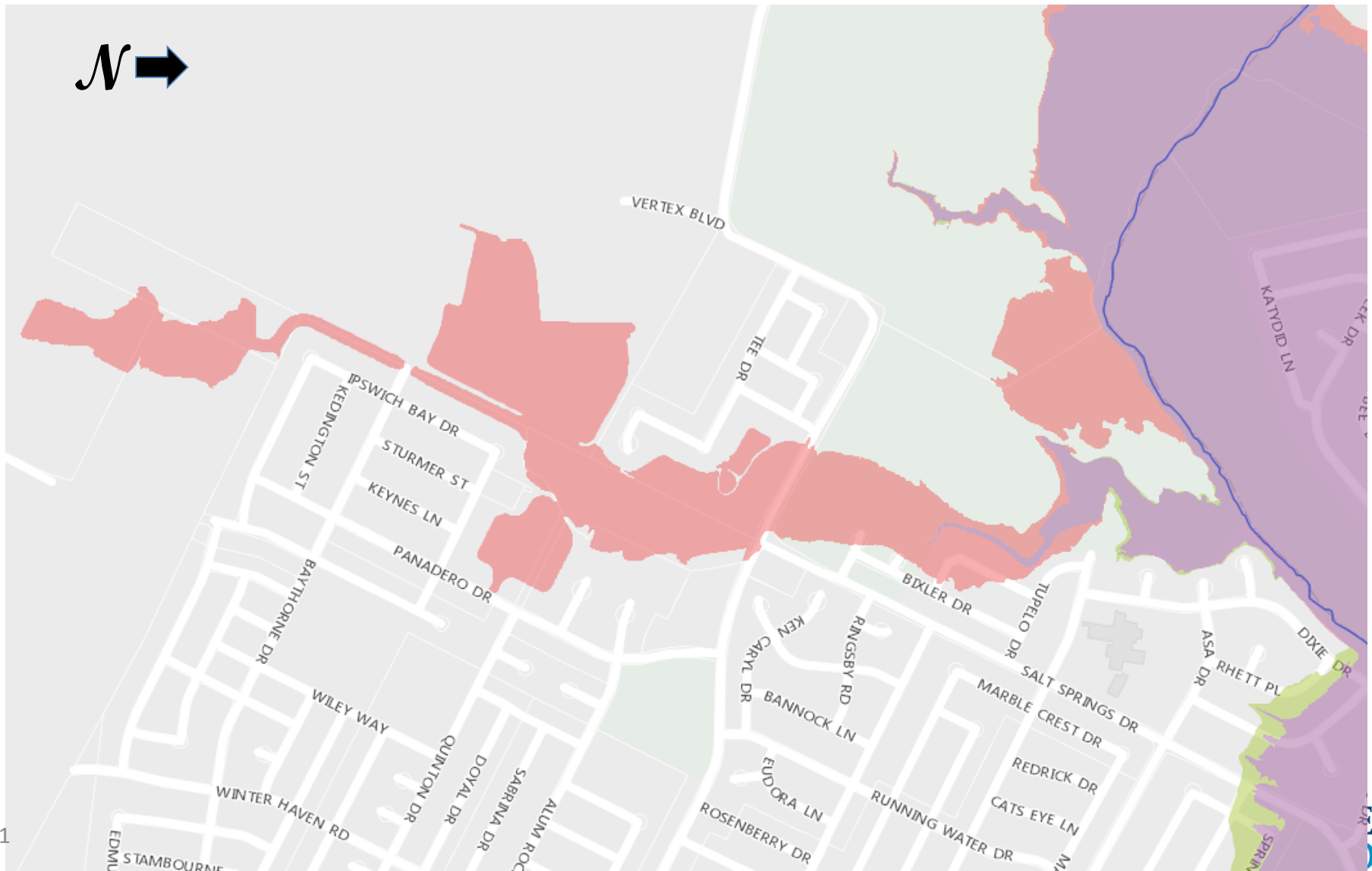
Floodplain Changes-Burleson Rd / US Hwy 183 / McKinney Falls Pkwy



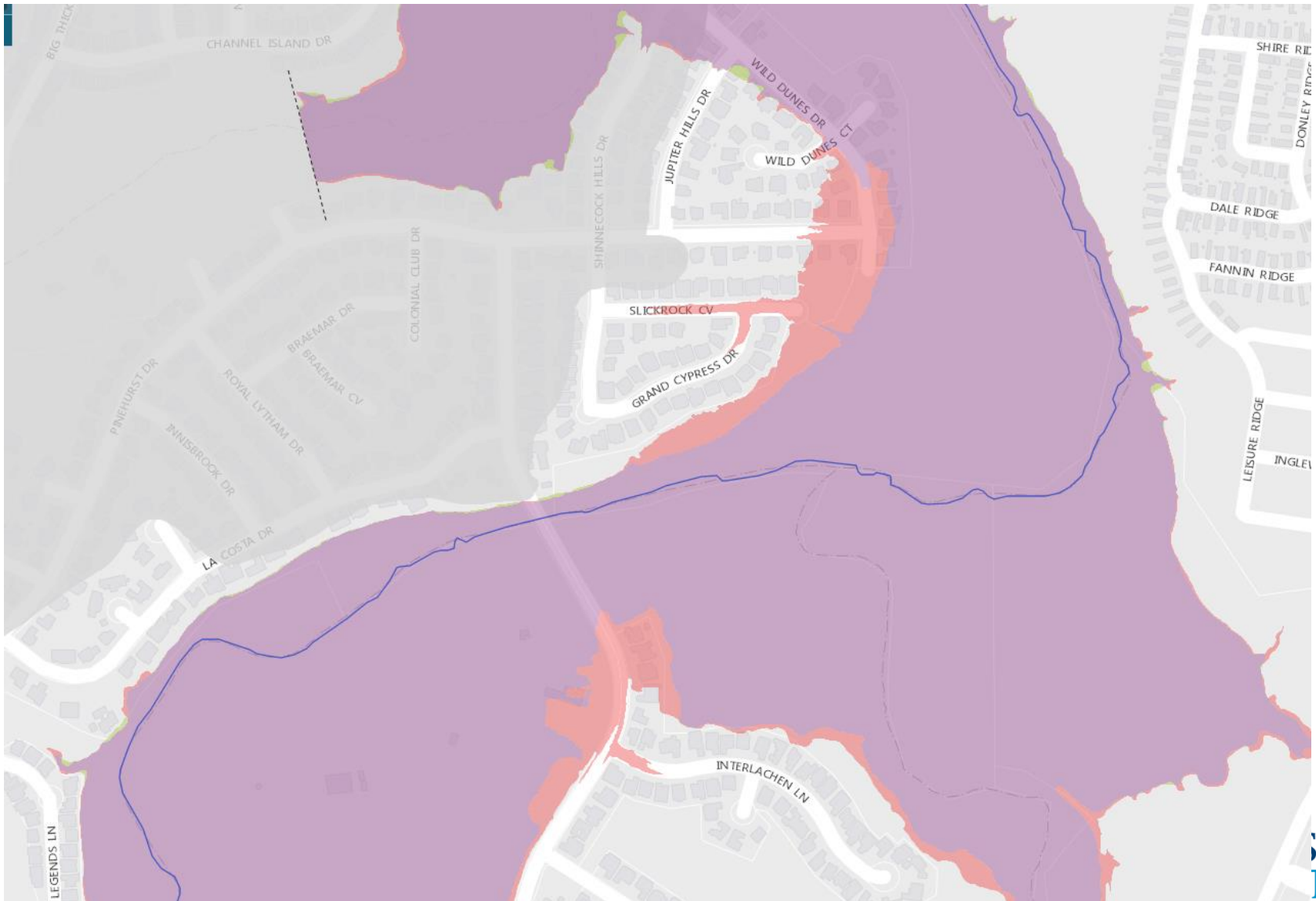
Floodplain Changes – Lower Onion Buyout Area

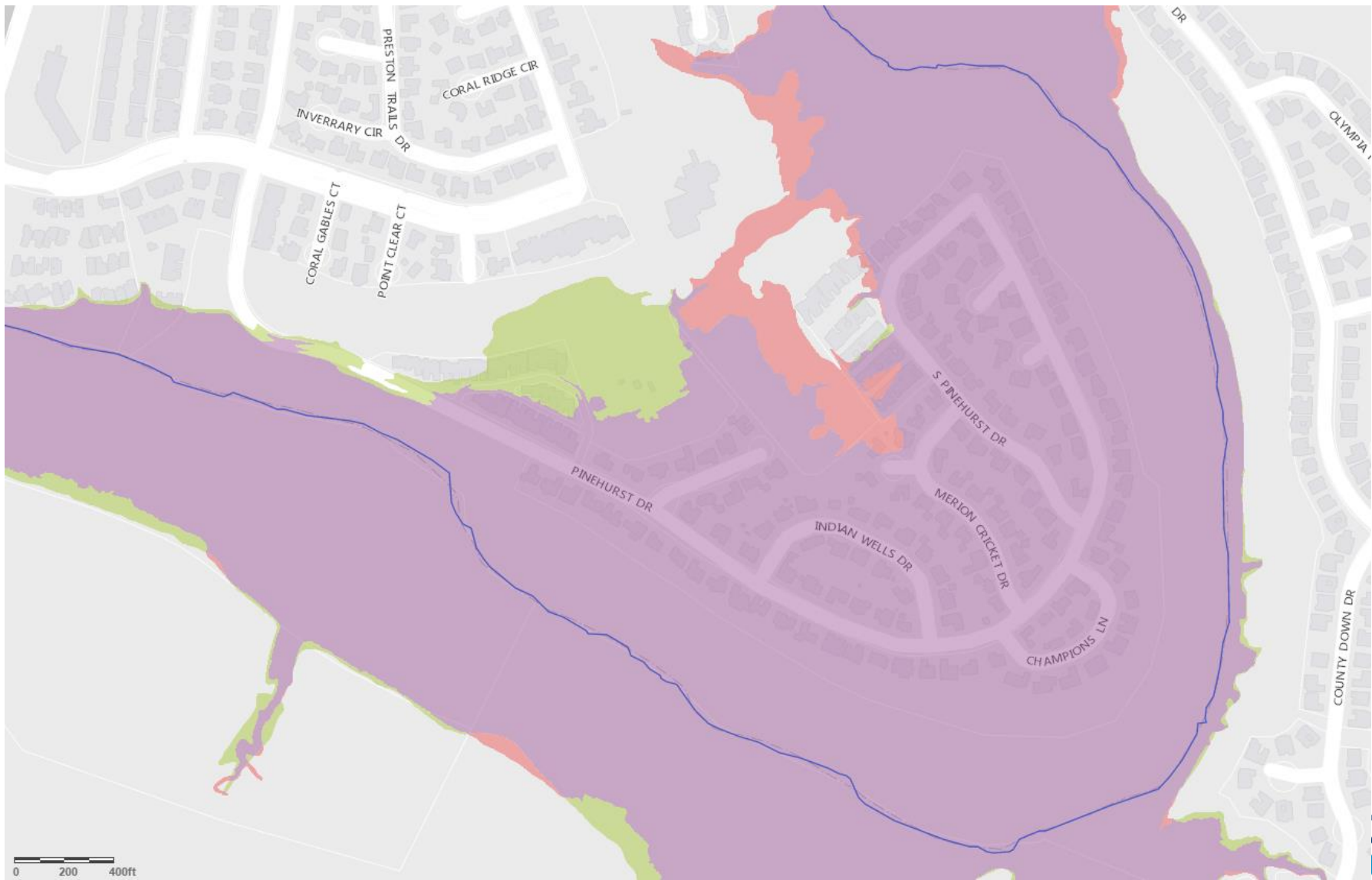


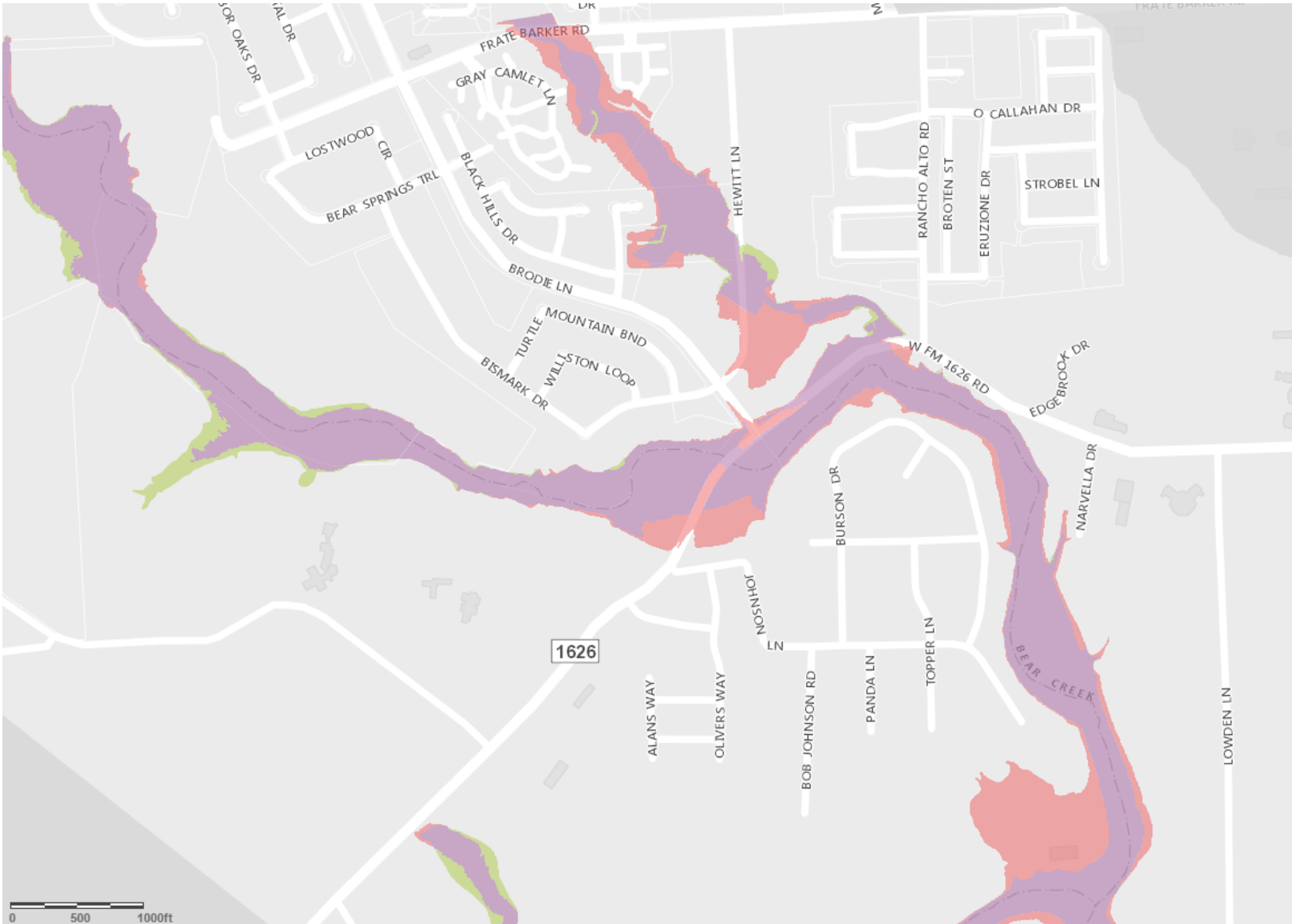
Floodplain Changes – Paces Mill



Floodplain Changes – Wild Dunes Area







Timeline for New FEMA Maps

Entraran en efecto los mapas de inundación con fines de urbanización

- Enero 2017

Apelaciones y Comentarios hacia FEMA

- Primavera 2017

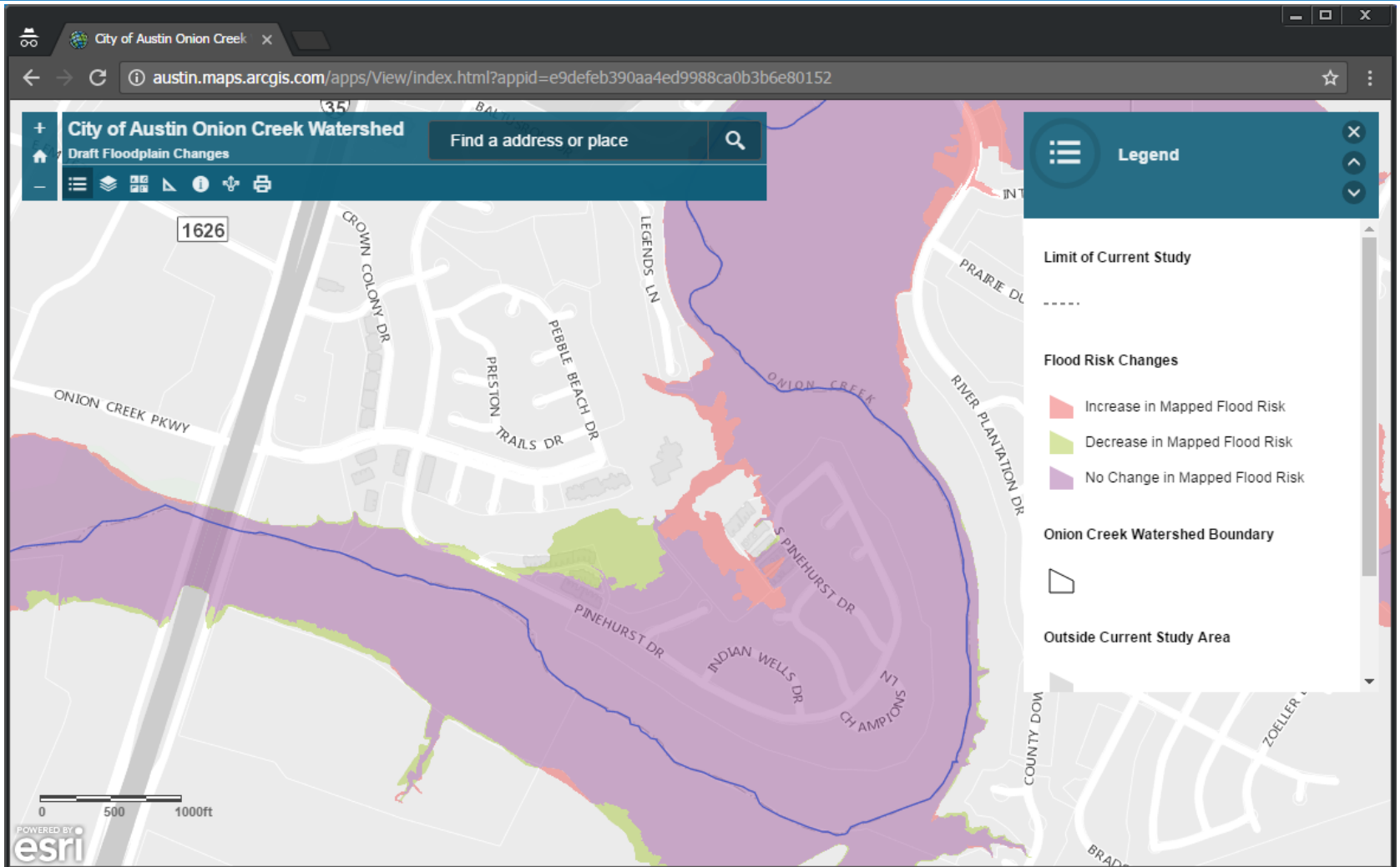
Producción de los mapas de FEMA terminados

- Otoño 2017

Los mapas de FEMA entrarán en efecto

- Otoño 2018

Floodplain Changes Web Map

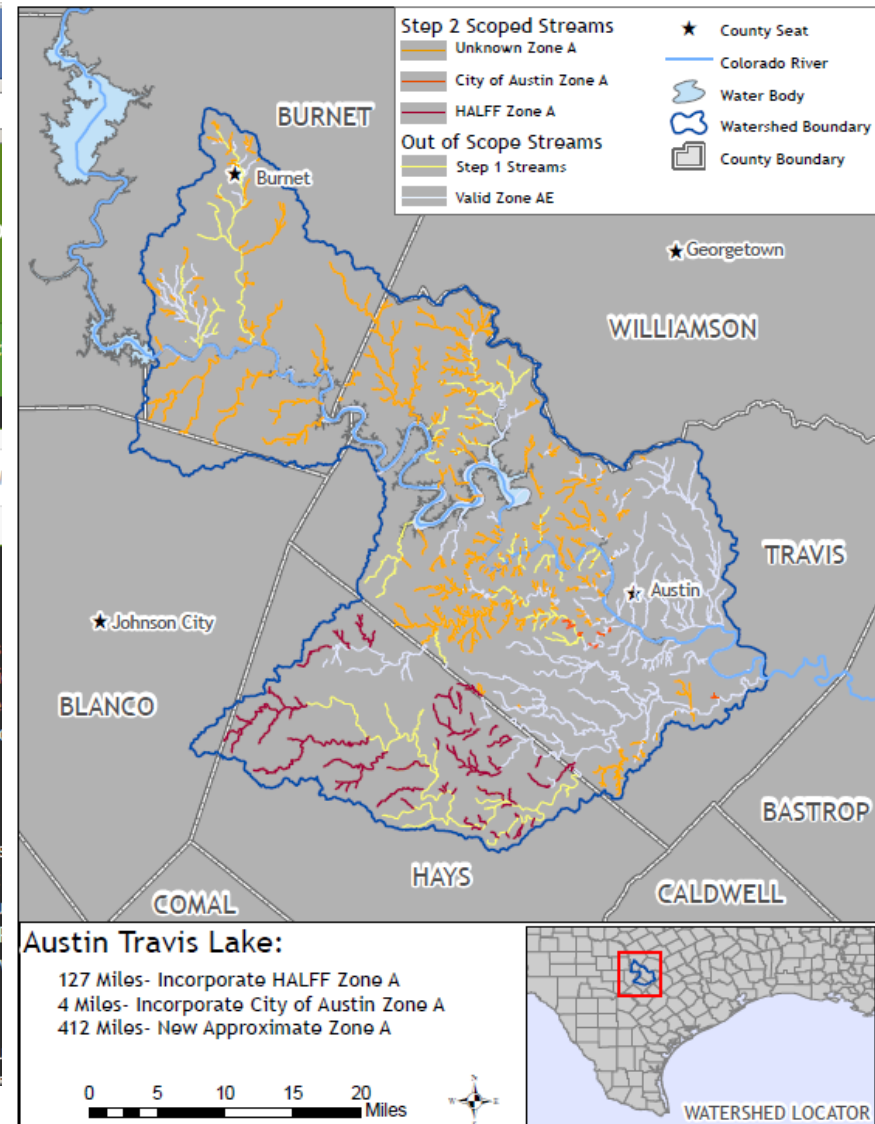


<http://www.austintexas.gov/onioncreekstudy>

Preliminary FEMA FIRM Maps

RiskMAP6.com – Austin-Travis Lakes HUC

The screenshot shows the RiskMAP6.com website. At the top, there is a navigation bar with the site name and a search bar. Below this is a green header with the RiskMAP6.com logo and the tagline "Helping communities understand their flood risk". A navigation menu includes links for Home, What is Risk MAP?, The Risk MAP Process Path, Communities: Know the Risk, Take Action: Empowering Communities, and Contact Us. A "Subscribe" section offers a newsletter called "The Voice" with a sign-up form. Two prominent green buttons are labeled "Find Your Preliminary Flood Maps" and "Find Your Effective Flood Map". On the left side, there is a "Steps to Resilience" list with icons for: Watershed Selected for Discovery, Discovery, Project Area Selection, Project Kick-off Meeting, Flood Risk Review Meeting, and Resilience Meeting. The main content area features a "Welcome to RiskMAP6.com" message and a paragraph explaining the program's purpose: "Thank you for visiting RiskMAP6.com. Risk MAP stands for Mapping, Assessment and Planning, which is a nationwide program developed by FEMA to work together with State and local communities in building an understanding of a complete picture of their natural hazard risk. An informed public is empowered to take actions to reduce their flood risk." Below this, it states: "FEMA Region 6 covers a five state area: Arkansas, Louisiana, Missouri, New Mexico, Oklahoma and Texas. Find out more about Risk MAP and the Risk MAP Process Path for Region 6 through our website. Also, sign up for our bi-annual FEMA Region 6 Flood Risk MAP newsletter, 'The Voice', through this website. Previous issues are also available under the Resources tab." At the bottom of the main content area, it says: "If your community is currently involved in a Risk MAP study, please contact your local Risk MAP study leader. For more information, visit our Communities: Know the Risk tab. If Preliminary Flood Maps are available for your community, visit the Find Your Preliminary Flood Maps button." The footer contains the number "17".



How you may be affected

- Seguridad para inundaciones y como prepararse
- Seguros contra inundaciones
- Reglas de urbanización
- Meta: Mejor entendimiento, comunicación y mitigación del riesgo a inundaciones



Flood Safety & Preparedness

Aprender...

... Las inundaciones pueden ser mortales. Aprenda donde pueden ocurrir las inundaciones.

www.ATXFloodPro.com

www.ATXFloods.com

Planear...

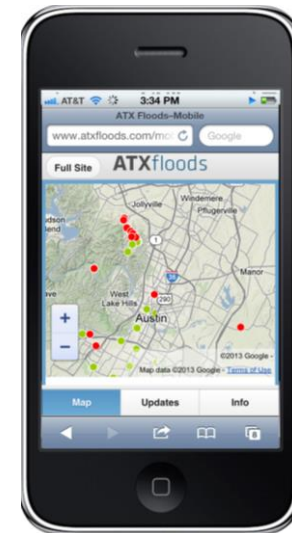
... Haga un plan y un kit de emergencia.

www.austintexas.gov/department/preparedness

... Considere comprar seguro para inundaciones

Vivir...

... Las inundaciones pueden tener un efecto devastante a familias y la comunidad.



USPO52702-5/27/81-AUSTIN, TEX: A resident of one of the hardest hit residential areas in the 5/25, flash flooding hoses mud out of his house, with some salvagable belongings stacked in the front yard along with trash swept in by the flood waters. Nine persons lost their lives in the Memorial Day flood. UPI Bob Thomas



El valor promedio de reclamos de seguro de inundacion en Austin es de \$26,700

- *La mayoría de las pólizas de propietarios e inquilinos (homeowners and renters, en inglés) no cubren daños causados por inundaciones.*
- *FEMA tiene un nuevo tipo de póliza diseñada para facilitar a los propietarios de viviendas recién asignados zonas de inundación dentro del programa.*
- *Hable con su agente de seguros para obtener una cotización de seguro contra inundaciones.*
- *Encuentre un agente de seguros y más información en www.FloodSmart.gov*

Regulations and Development



- Habrá reglamentos de permisos más estrictos que se aplicaran para cualquier construcción, remodelación, construcción u otro desarrollo y reparaciones en propiedades en las zonas de inundación.
- Esto minimiza los impactos de inundaciones para la comunidad y el desarrollo.
- El costo del riesgo de inundación es compartido por todos en la comunidad

¿Preguntas?

City of Austin
Watershed Protection Department

Floodplain Office
(512) 974-2843

FloodPro@austintexas.gov

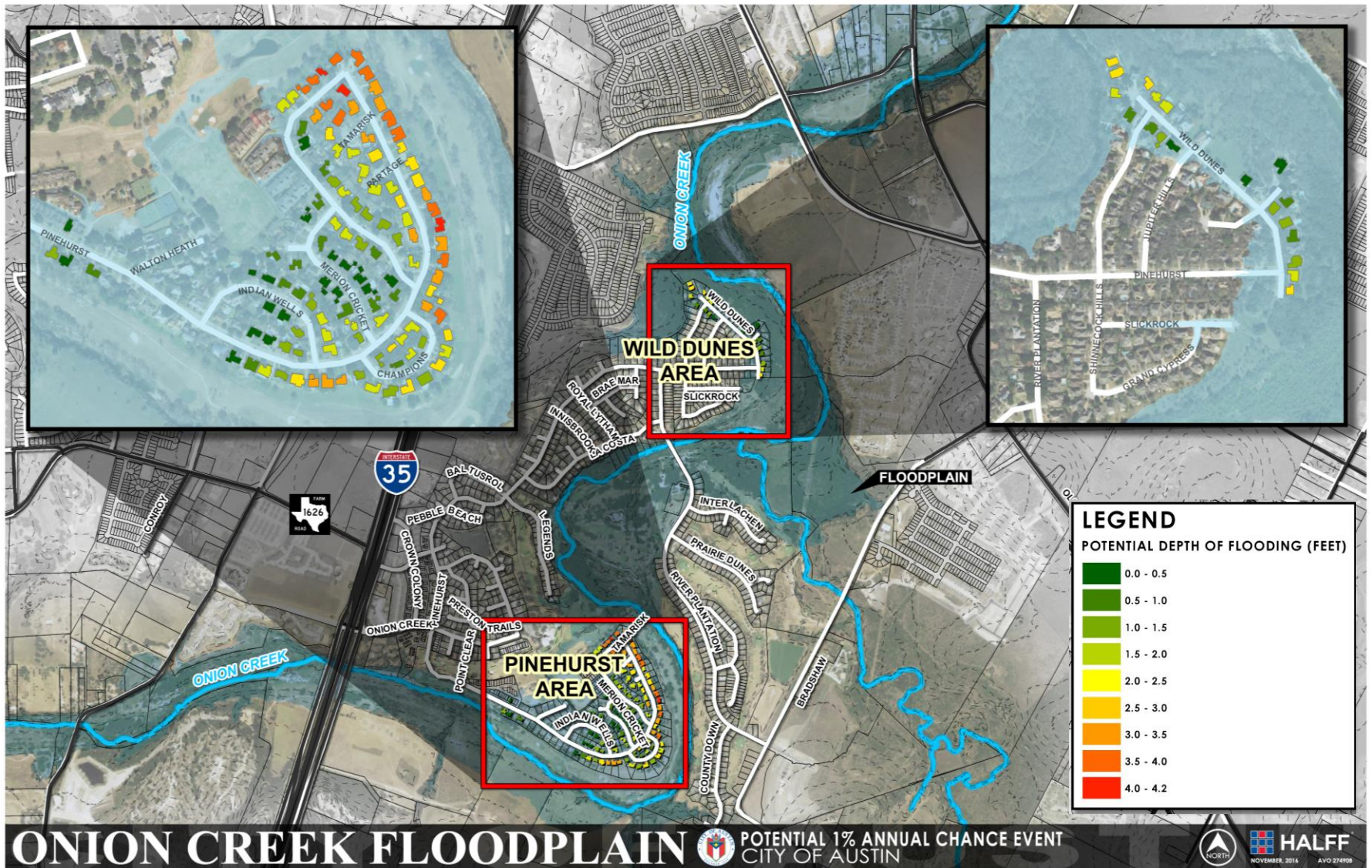
<http://www.austintexas.gov/onioncreekstudy>

Paces Mill Area – Potential Solutions

- 27 homes in the 100-year floodplain
- Buyouts may not be a feasible answer
- Projects being evaluated:
 - Channel benching
 - Floodwall or berm
 - Upstream detention
- City submitted application for Community Development Block Grant Disaster funding for potential Paces Mill project.
- WPD Creek Flood CIP Ranking – Without grant funding, project is likely several years away from being considered.

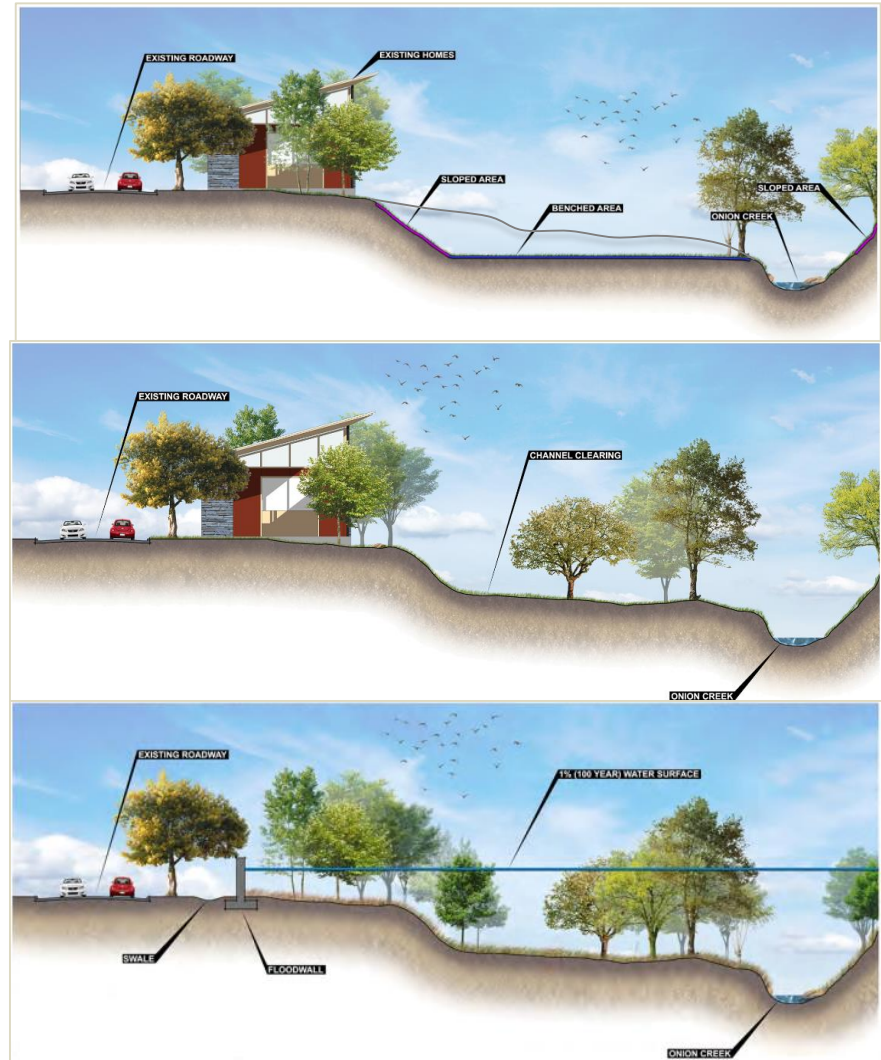


Onion Creek Neighborhood Flood Risk



Onion Creek Mitigation Alternatives

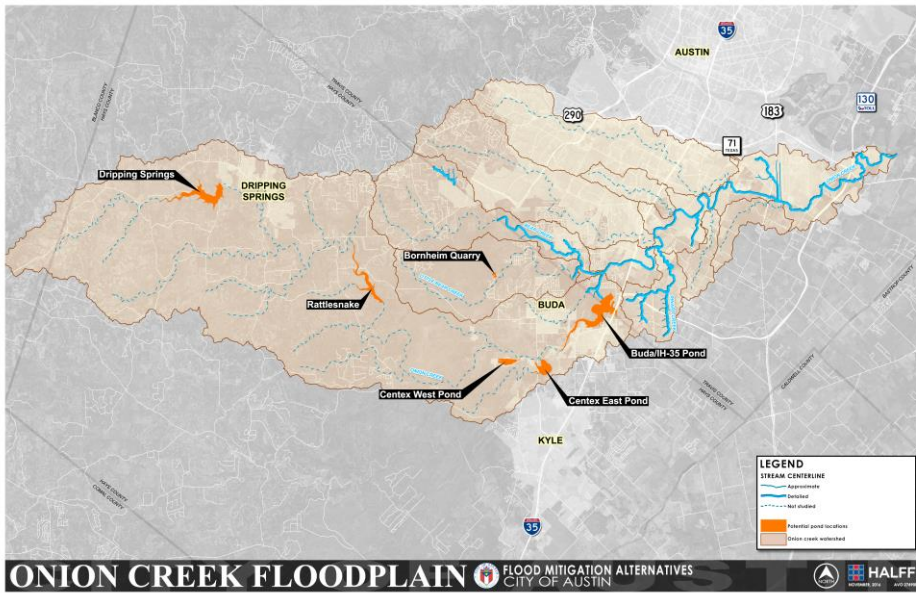
- Preliminary Analysis
 - Regional Detention
 - Channel Clearing
 - Channel Modification
 - Floodwall
 - Property Acquisition
- Currently Refining Alternatives
 - Combinations of options



Regional Detention

- Evaluated Regional Ponds
 - Dripping Springs Pond
 - Rattlesnake Pond
 - Centex West Regional Pond

- Centex East Regional Pond
- Buda / IH-35 Regional Pond
- Bornheim Quarry



Dry Comal Creek Dam, Comal County / ~\$20M / ~2,900 ac-ft

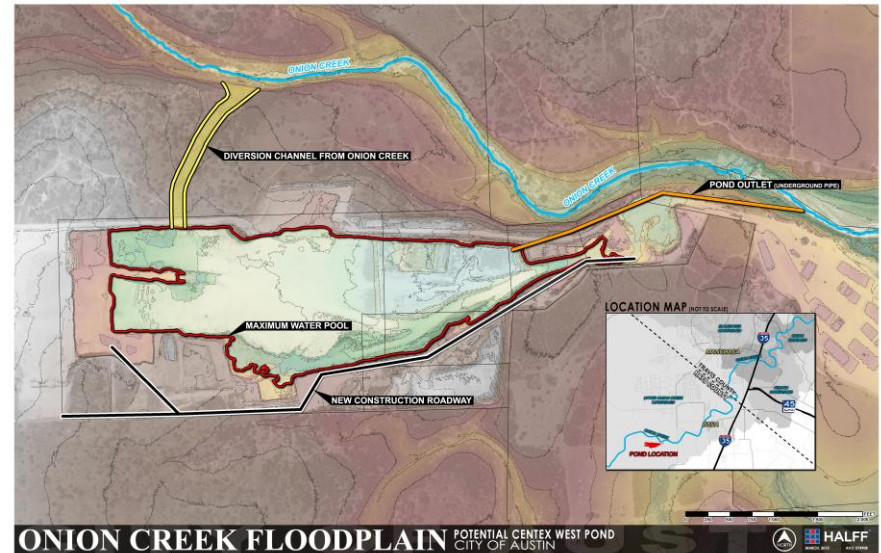
Regional Detention

Benefits

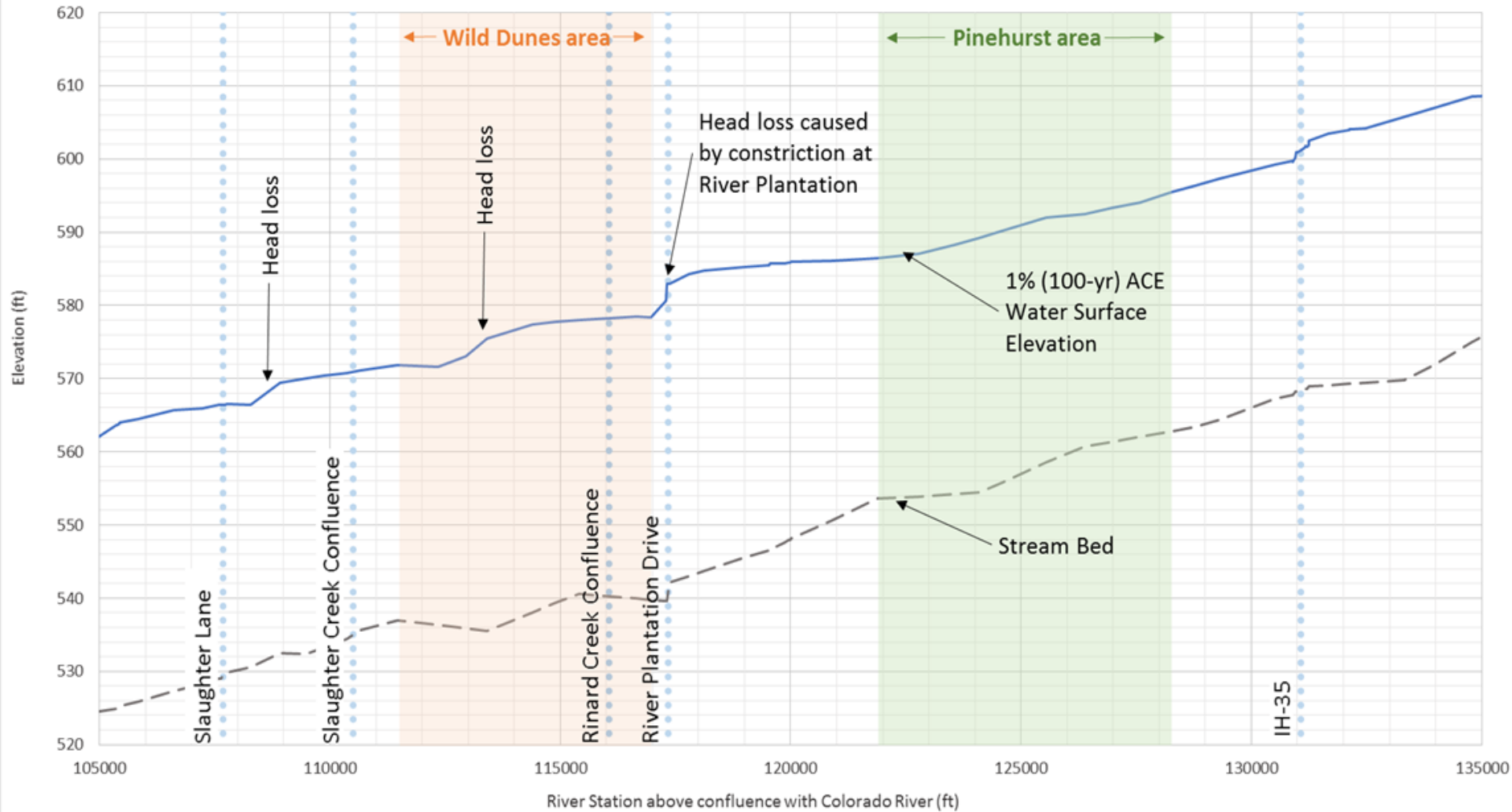
- 10-13% reduction of flow
- 1 to 3 ft Water Surface Reduction
- Mitigated Structures
 - 90 Pinehurst
 - 4 Wild Dunes

Constraints

- Stakeholder Coordination
- Property Purchase
- Dam Safety / Permitting
- Environmental Impacts
- Combined Alternative



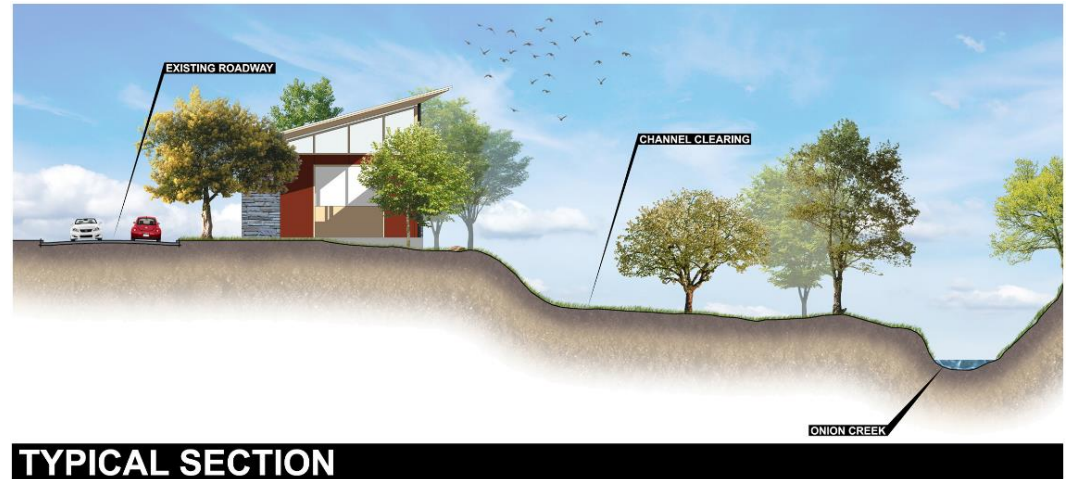
Hydraulic Mitigation



Channel Clearing

Benefits

- 0.5 to 2.5 ft Water Surface Reduction
- Mitigated Structures
 - 78 Pinehurst
 - 7 Wild Dunes



Constraints

- Perpetual Maintenance
- Stakeholder Coordination
- Property Purchase
- Environmental Impacts
- Golf Course Impacts
- Combined Alternative



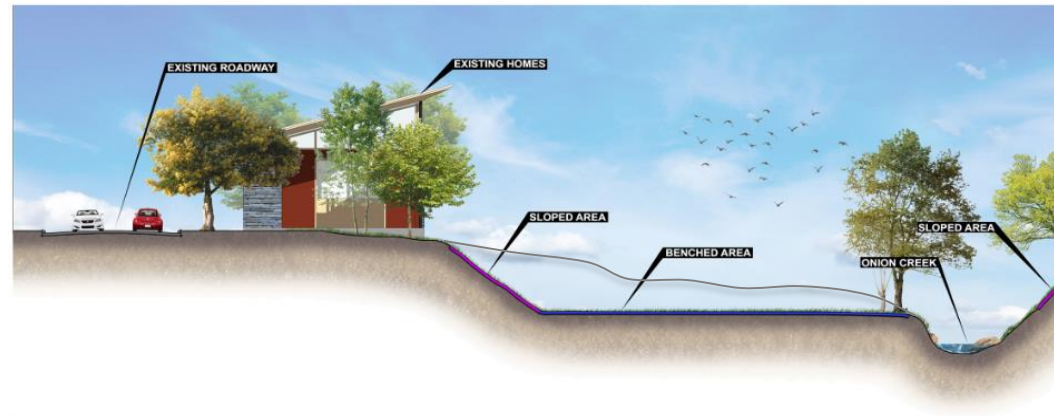
Channel Modification

Benefits

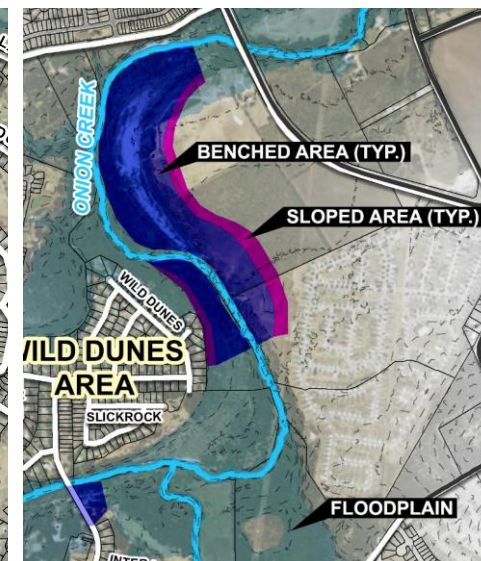
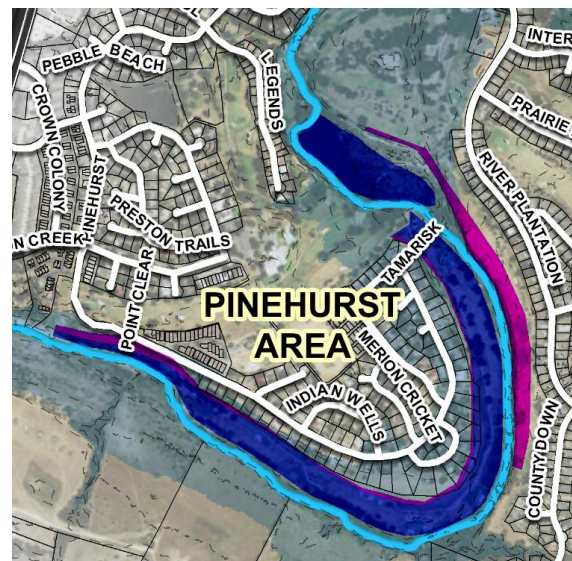
- 1.5 to 6 ft Water Surface Reduction
- Mitigated Structures
 - 105 Pinehurst
 - 18 Wild Dunes

Constraints

- Perpetual Maintenance
- Stakeholder Coordination
- Property Purchase
- Environmental Impacts
- Golf Course Impacts
- Combined Alternative



TYPICAL SECTION



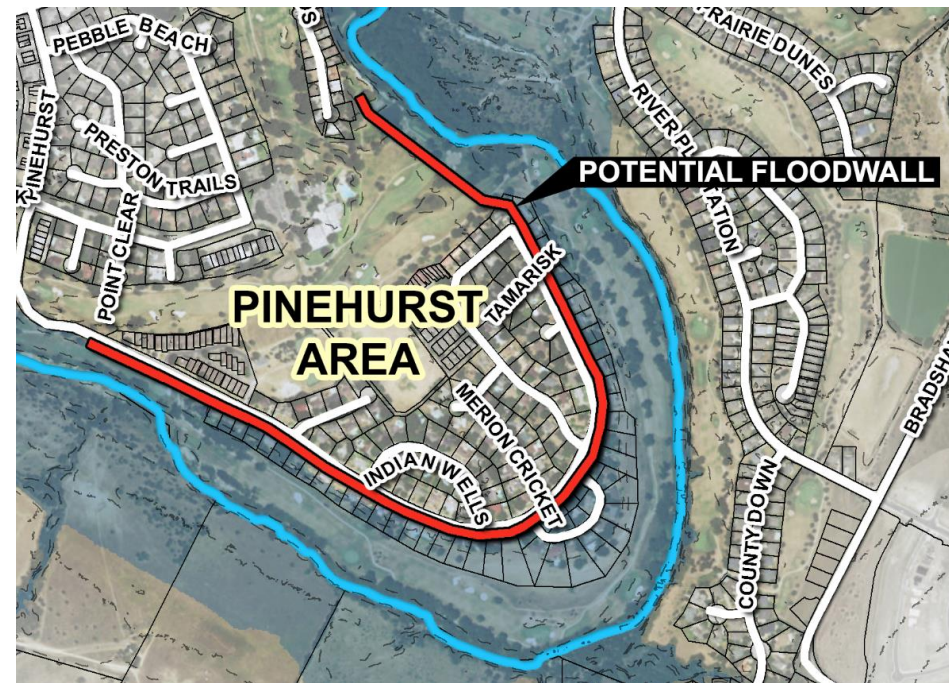
Flood Protection Wall

Benefits

- 69 Mitigated Structures
- Higher level of protection

Constraints

- Stakeholder Coordination
- 55 Property Purchases
- Levee Compliance / Permitting
- Maintenance
- Environmental Impacts
- Golf Course Impacts



Property Acquisition

Benefits

- Mitigated Structures
 - 114 Pinehurst
 - 18 Wild Dunes
- Scalable Protection

Constraints

- Community Impacts
- Maintenance

