



Watershed Protection Ordinance (WPO): Stakeholder Meeting CREEK PROTECTION

September 23, 2011

Council Resolution 20110113-038

1. Creek Protection
2. Floodplain Protection
3. Development Patterns and Greenways
4. Improved Stormwater Controls
5. Mitigation Options
6. Simplify Regulations and Maintain Opportunity
7. Coordinate with Regional Partners

Stakeholder Input

Adoption Schedule

Stakeholder Meetings

Sep 2011 – April 2012

(Meetings approx. every two weeks)

- | | |
|---|------------------|
| 1. Creek Protection: | Sep 9, 23, Oct 7 |
| 2. Floodplain Protection: | Oct 14, Oct 28 |
| 3. Development Patterns & Greenways: | Nov - Dec |
| 4. Improved Stormwater Controls: | Dec - Jan |
| 5. Simplify & Clarify Regs/Maintain Opportunity: | Jan - Feb |
| 6. Mitigation Options (Desired Development Zone): | Feb - Mar |
| 7. Draft Ordinance: | Apr |

Boards & Commissions

May – June 2012

City Council

August 2012

Travis County Commissioner's Court

Fall 2012

Work Session Summary: Creek Protection

Session No. 1 (Sep. 09)

- **Introduction**
- **Riparian Zone Benefits**
- **Problems & Costs of Stream Encroachment**
- **Existing Stream Setbacks**

Session No. 2 (Sep. 23)

- **Case Studies**
- **Potential Strategies**
- **Work Group Analysis & Feedback**

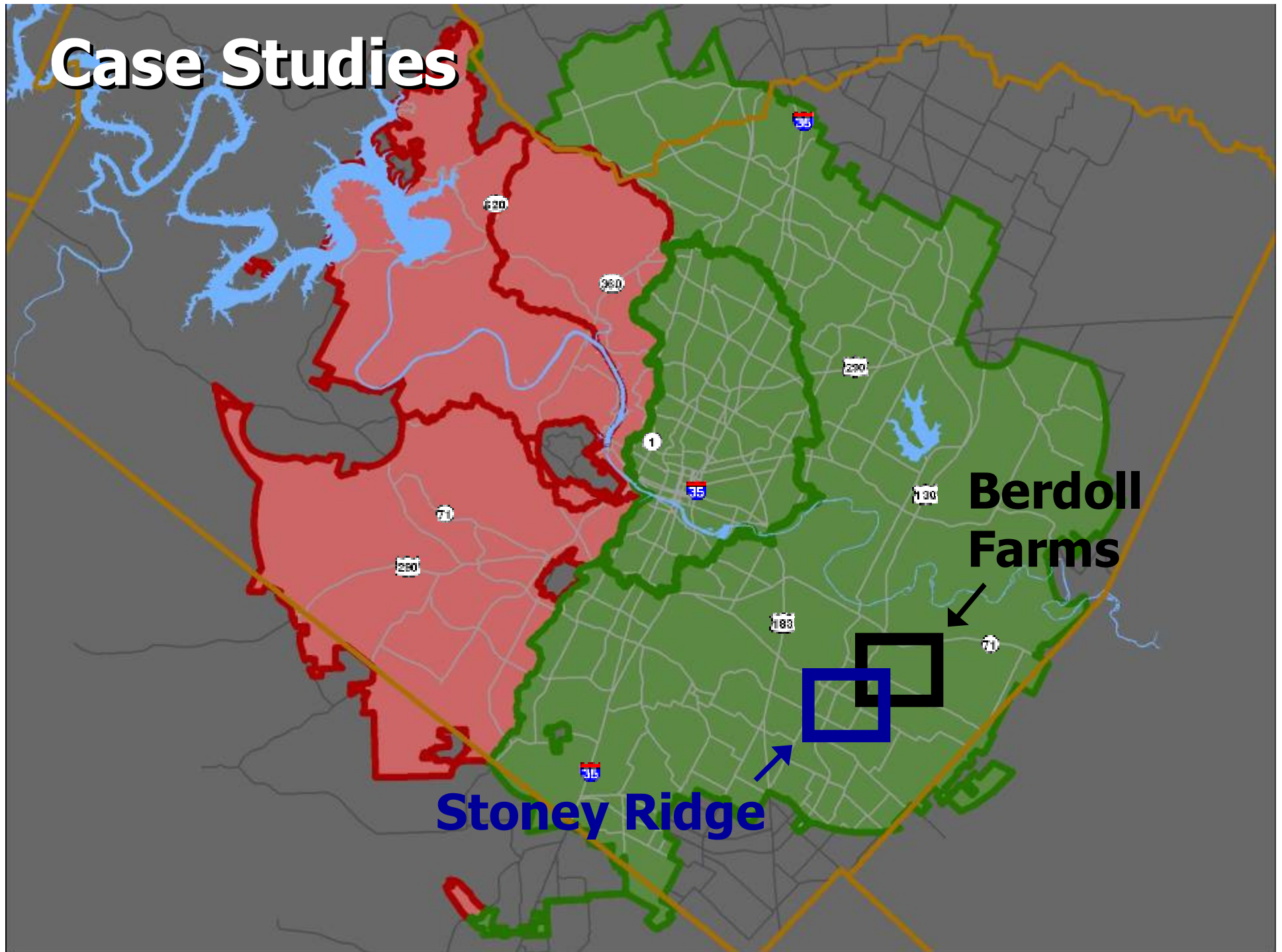
Session No. 3 (Oct. 07)

- **Discussion & Stakeholder Feedback**

Riparian Summary

- **Riparian zones/stream buffers have multiple benefits**
 - **Small area with big impact**
 - **Headwaters especially important**
- **Significant problems & costs when riparian zone is not protected; prevention critical**
- **Austin an early pioneer with stream setbacks: since 1980, much experience**
- **Existing buffer system does not protect headwaters in eastern creeks**

Case Studies



Stoney Ridge



**Dry Creek East Watershed
(Suburban)
113 Acres
490 Single Family Lots**

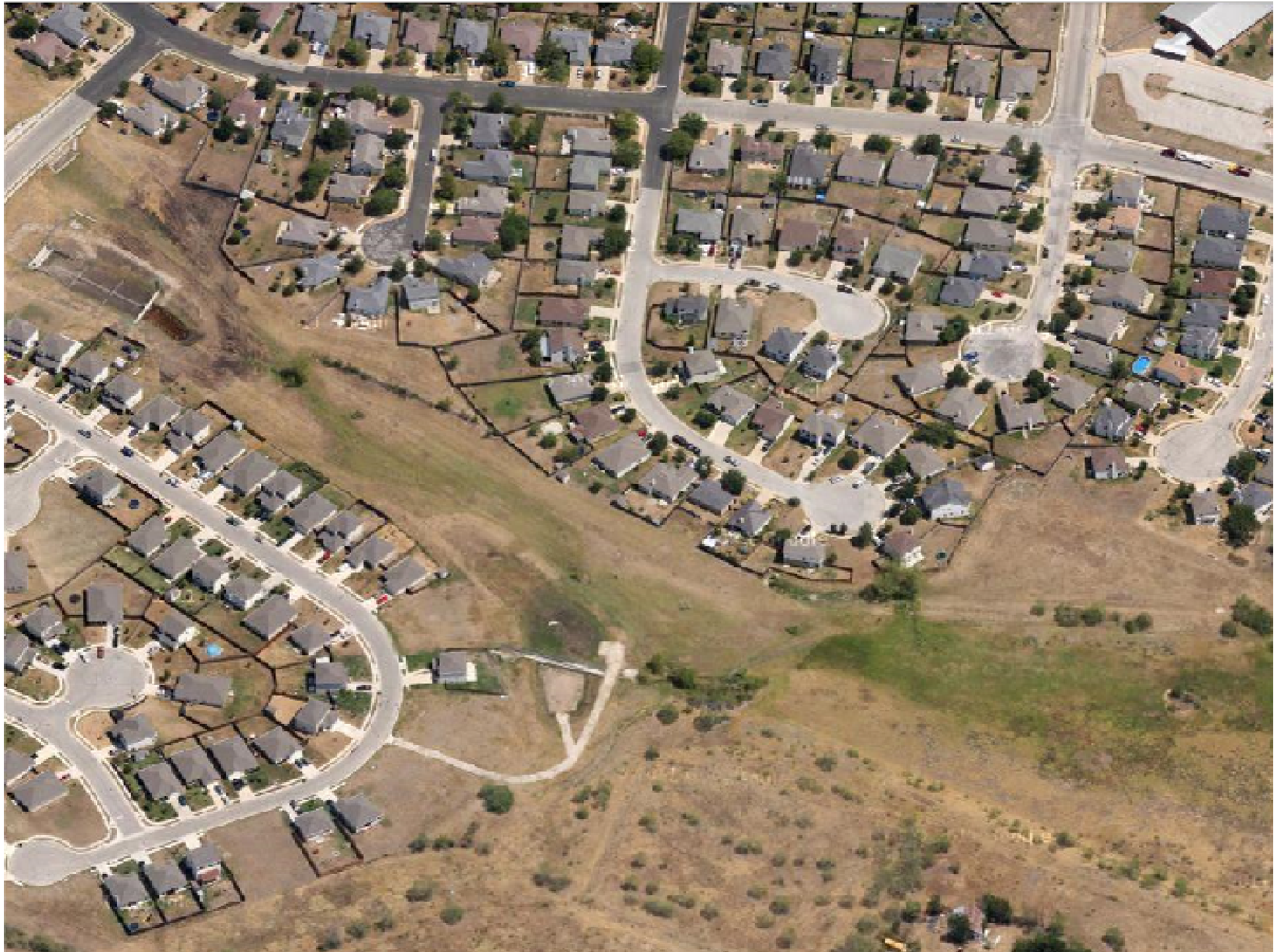












Berdoll Farms

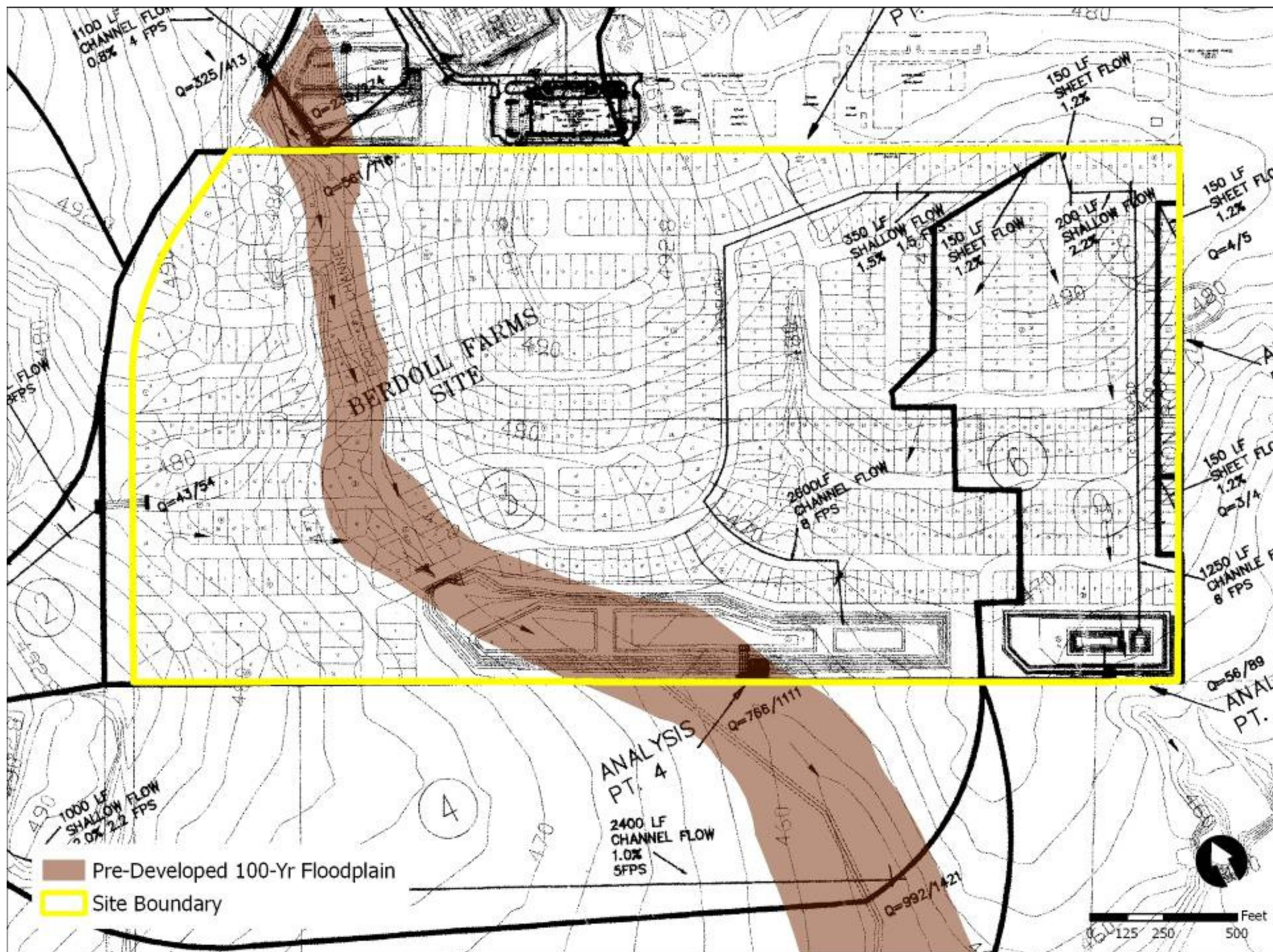


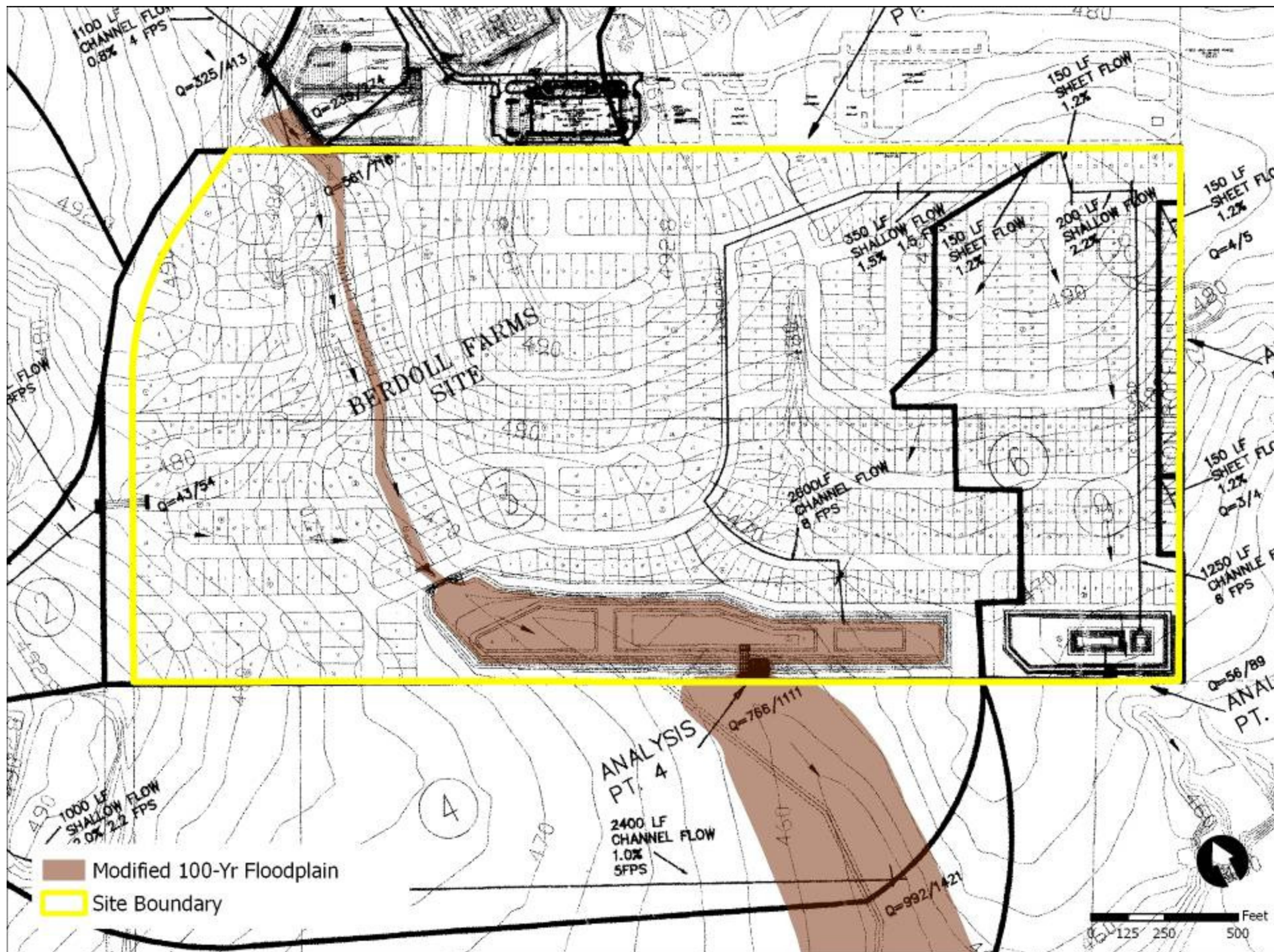
**Dry Creek East Watershed
(Suburban)
145 acres
685 Single Family Lots**

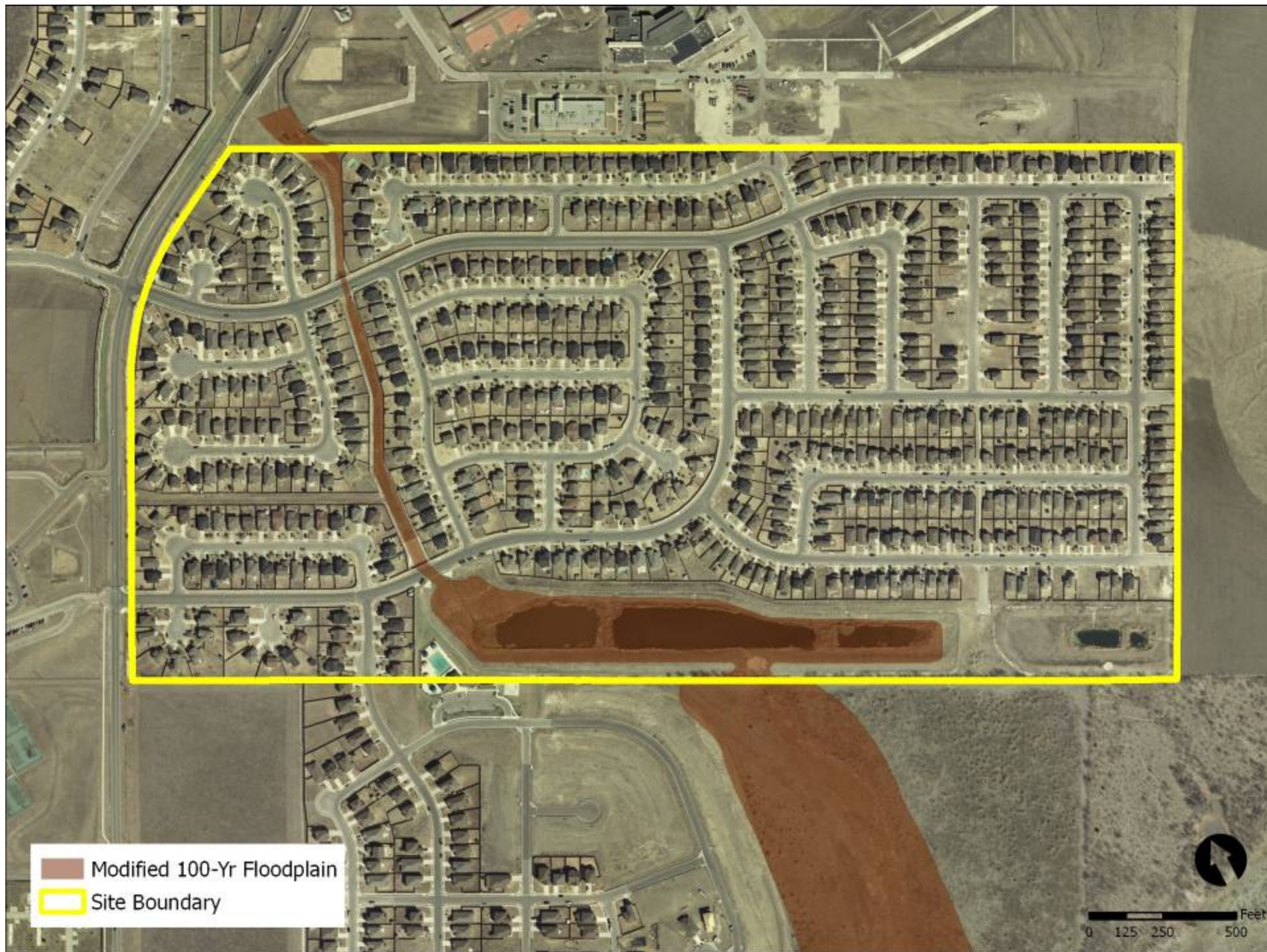








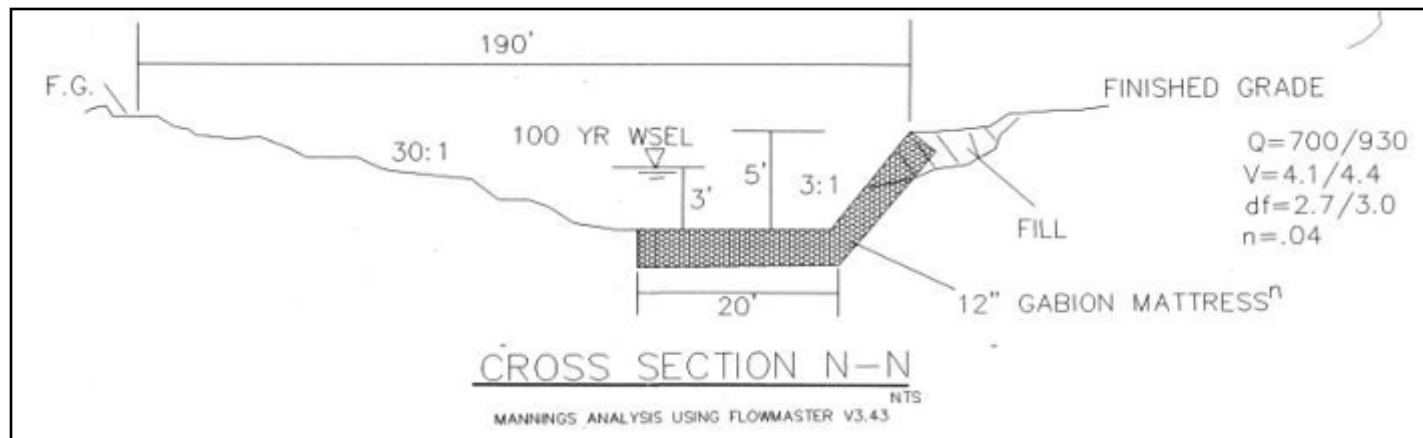
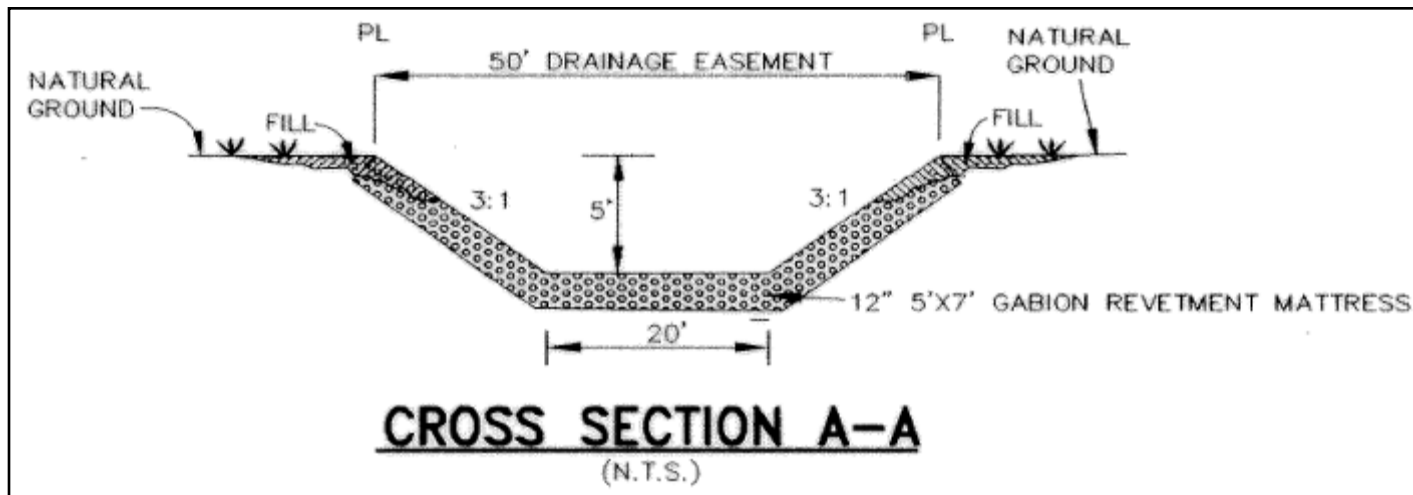




- Modified 100-Yr Floodplain
- Site Boundary



Channel Design









Creek Protection: Potential Strategies

- **Extend creek buffers into headwaters**
 - **64-acre drainage area threshold**
- **Establish buffer widths to cover Erosion Hazard Zones & protect water quality**
 - **100-feet from centerline: minor waterways**
- **Identify strategies to maintain existing development potential & increase flexibility (Desired Development Zone)**
 - **Gross Site Area**
 - **Eliminate Water Quality Transition Zone**

100-ft. Critical Buffer

● 64 acres

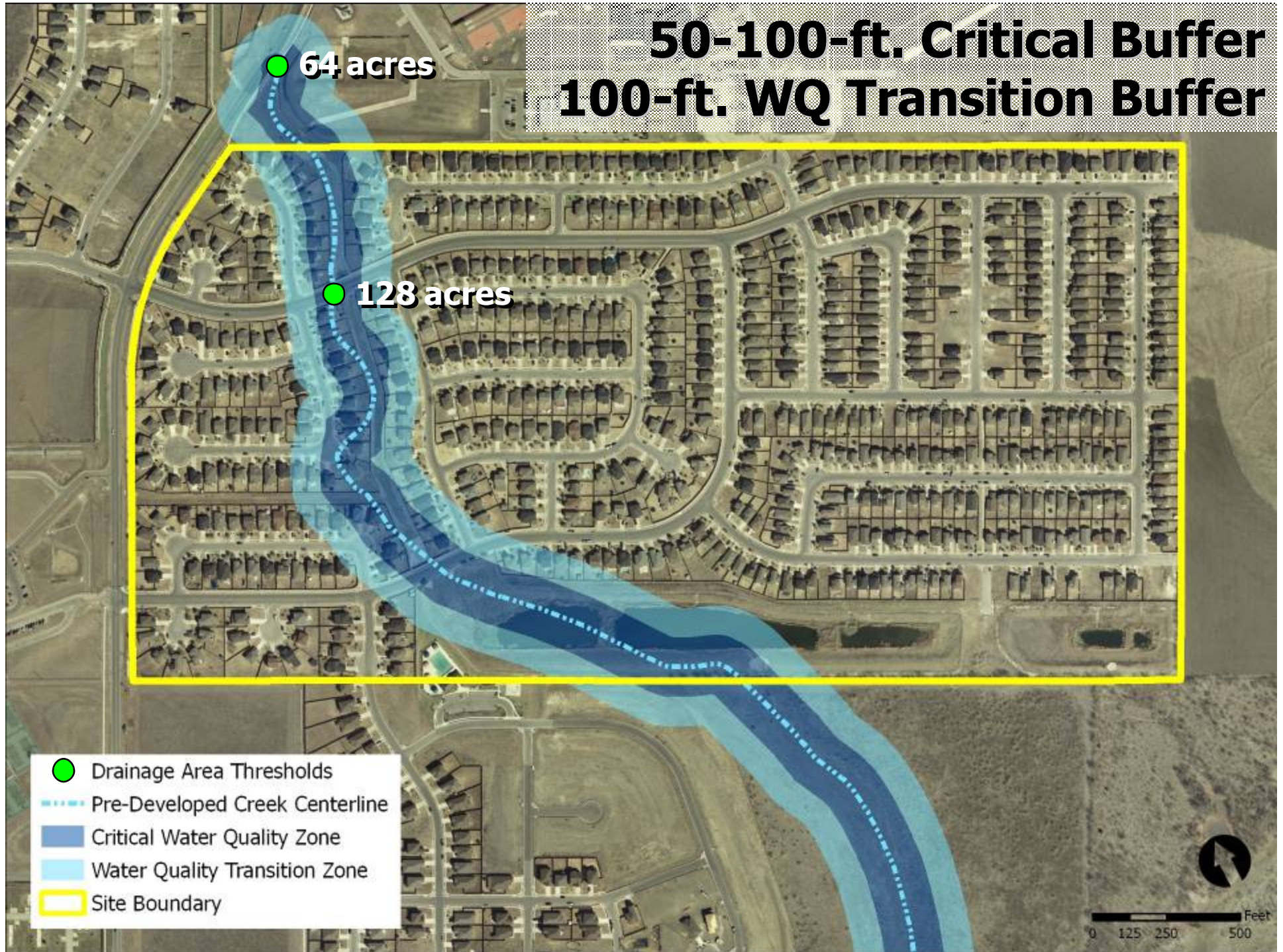
● 128 acres

- Drainage Area Thresholds
- Pre-Developed Creek Centerline
- Pre-Developed Headwaters Buffer (100 ft)
- Site Boundary

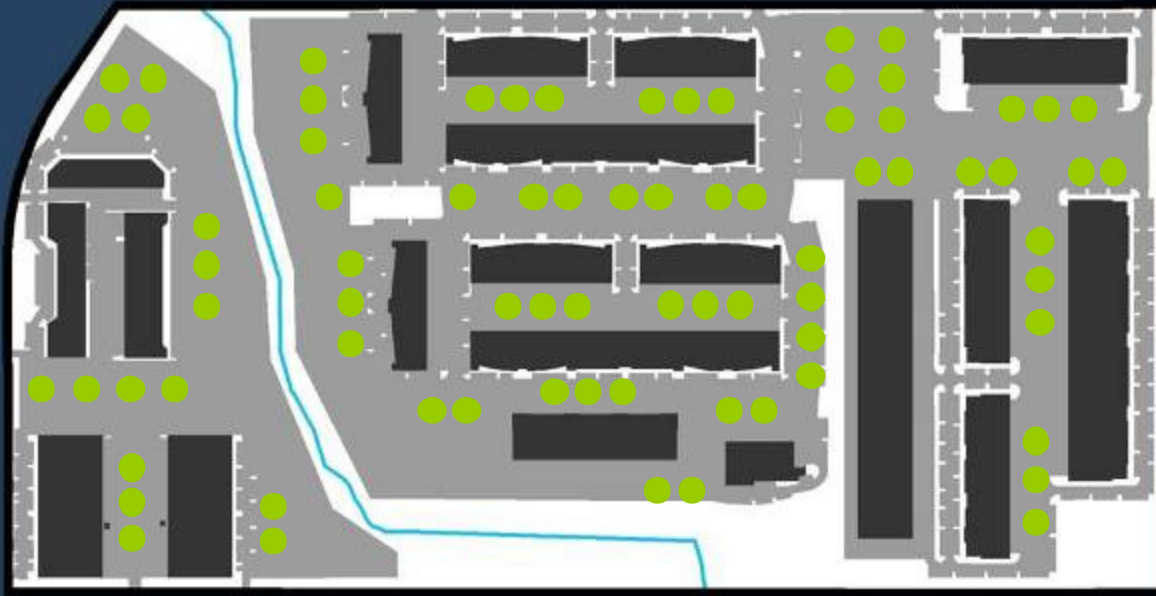


0 125 250 500 Feet

50-100-ft. Critical Buffer 100-ft. WQ Transition Buffer



Striking a Balance



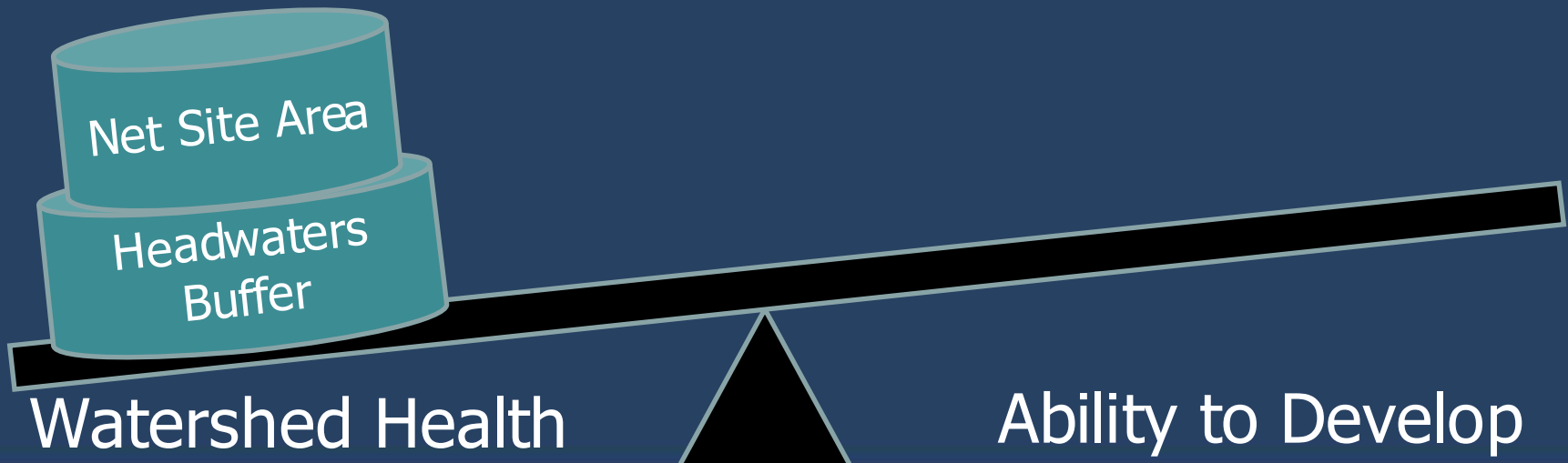
80%
**Impervious
Cover**



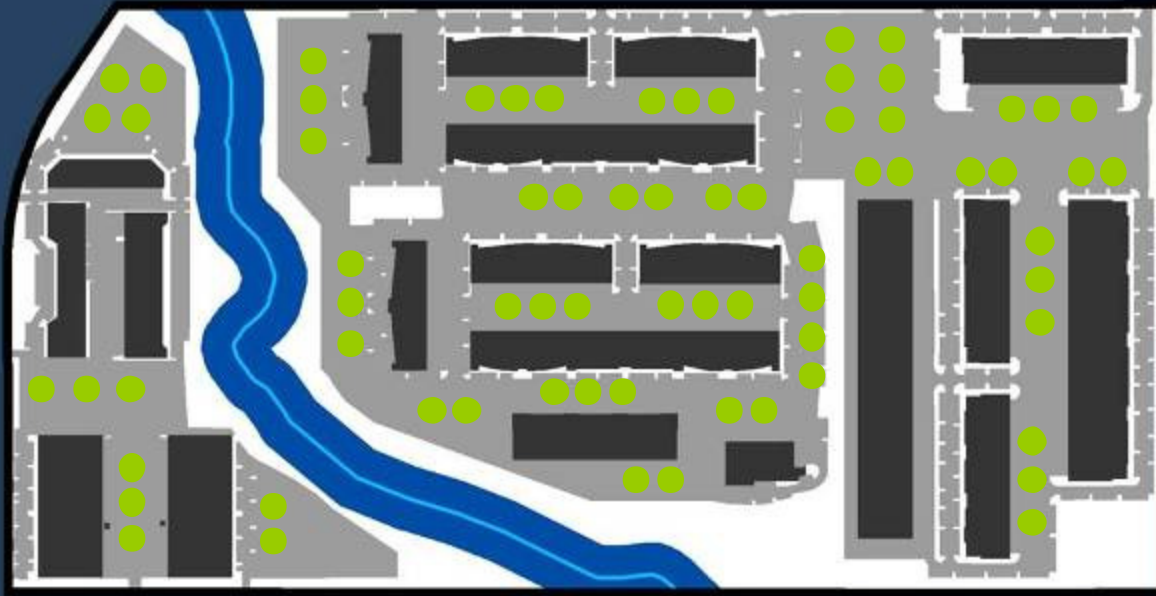
Striking a Balance



69%
Impervious
Cover



Striking a Balance



73%
Impervious
Cover

Net Site Area

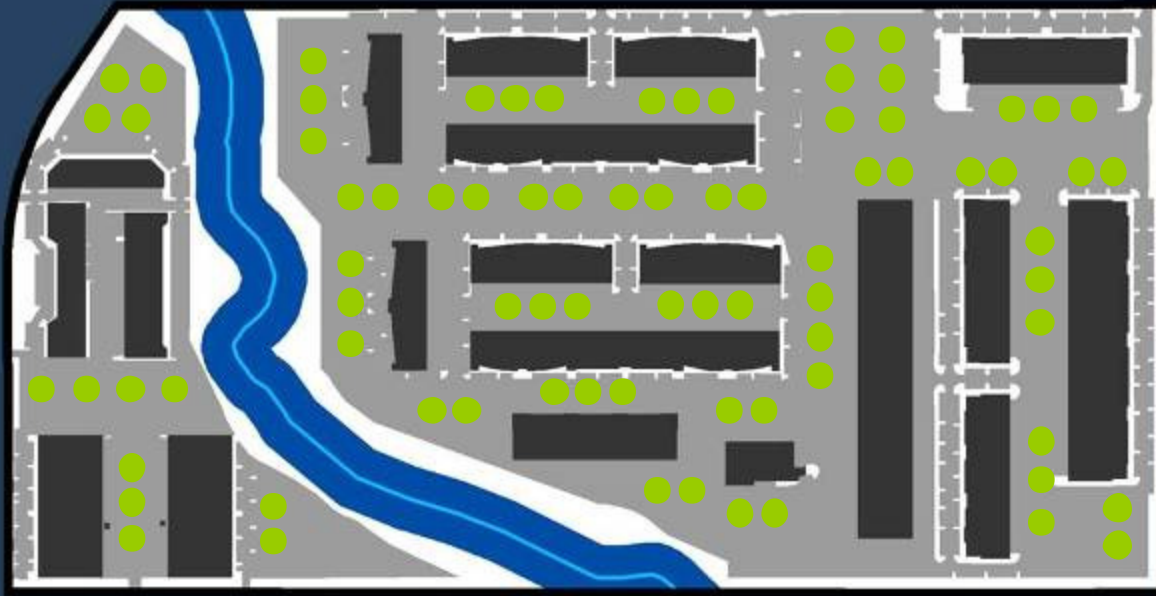
Headwaters
Buffer

Remove WQTZ

Watershed Health

Ability to Develop

Striking a Balance



80%
**Impervious
Cover**

Headwaters
Buffer

Gross Site
Area

Remove WQTZ

Watershed Health

Ability to Develop

Work Group Exercise

- **Review sample plan**
- **Explore options for increased headwaters protection**
- **Identify options to maintain existing development potential & increase flexibility**
- **Discuss potential opportunities & impacts**
- **Report preliminary findings to larger group**
- **Explore additional options in the next two weeks prior to the next meeting**