

**City of Austin  
Watershed Protection Ordinance (WPO)  
Phase 1 Overview**

**Environmental Board  
July 11, 2013**

# Council Resolution

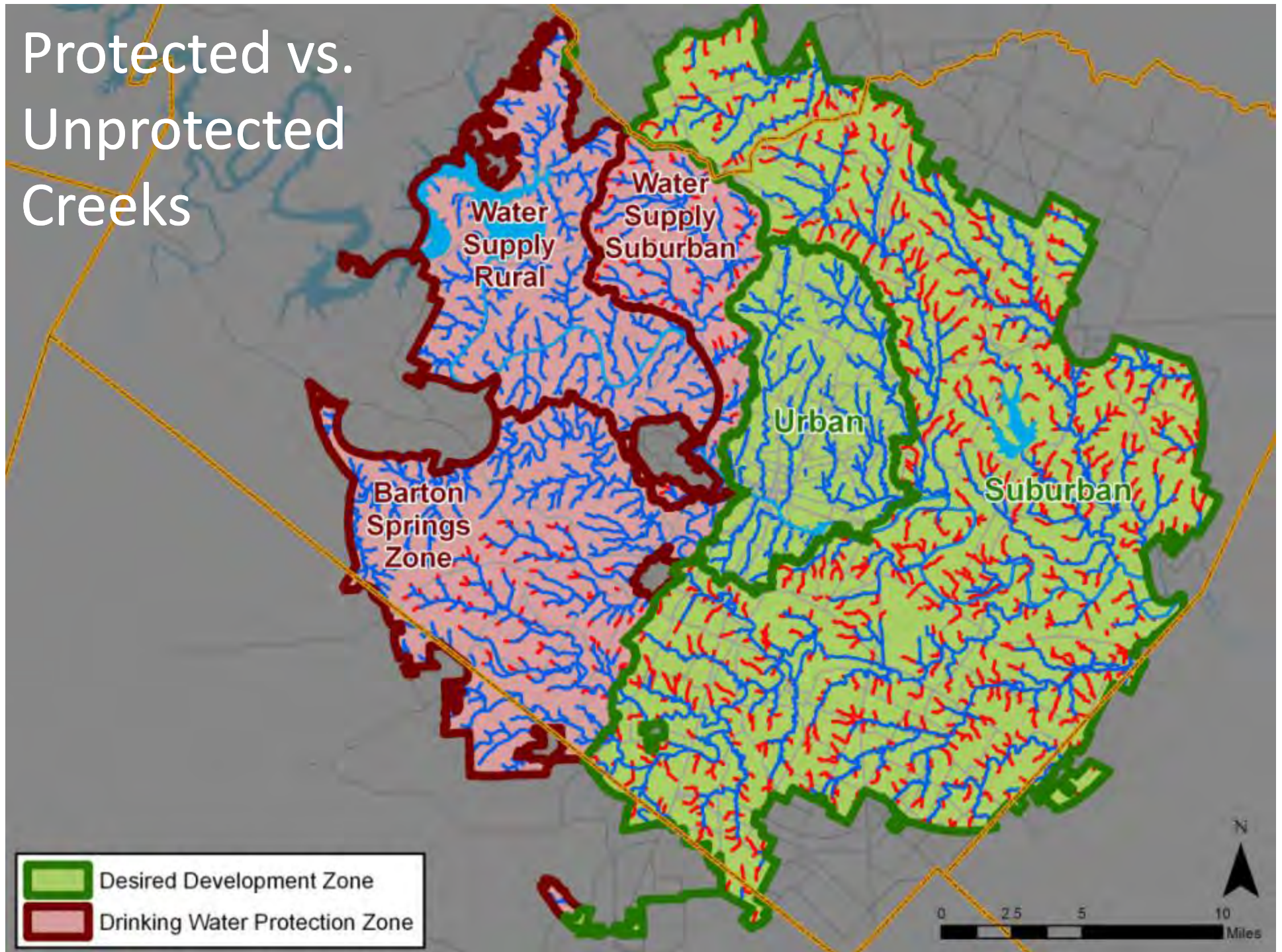
1. Creek Protection
2. Floodplain Protection
3. Development Patterns & Greenways
4. Improved Stormwater Controls
5. Mitigation Options
6. Simplify Regulations & Maintain Opportunity
7. Coordinate with Regional Partners

[\(Resolution #20110113-038\)](#)

# Board, Commission & Stakeholder Comments and Concerns

- Stream buffer extents: existing vs. proposed
- Impacts of Gross Site vs. Net Site Area
- Quarry redevelopment incentives
- Subsurface pond inspections
- 5,000 sq. ft. impervious cover threshold for water quality controls
- BSZ Redevelopment Exception:
  - Applicability limits
  - Increased use concerns; Council initiation
- 5,000 sq. ft. roadway exemption from water quality & impervious cover requirements
- Boundary street deduction
- Managed turf & ballfields in buffers
- Trails in stream buffers (location, runoff controls)

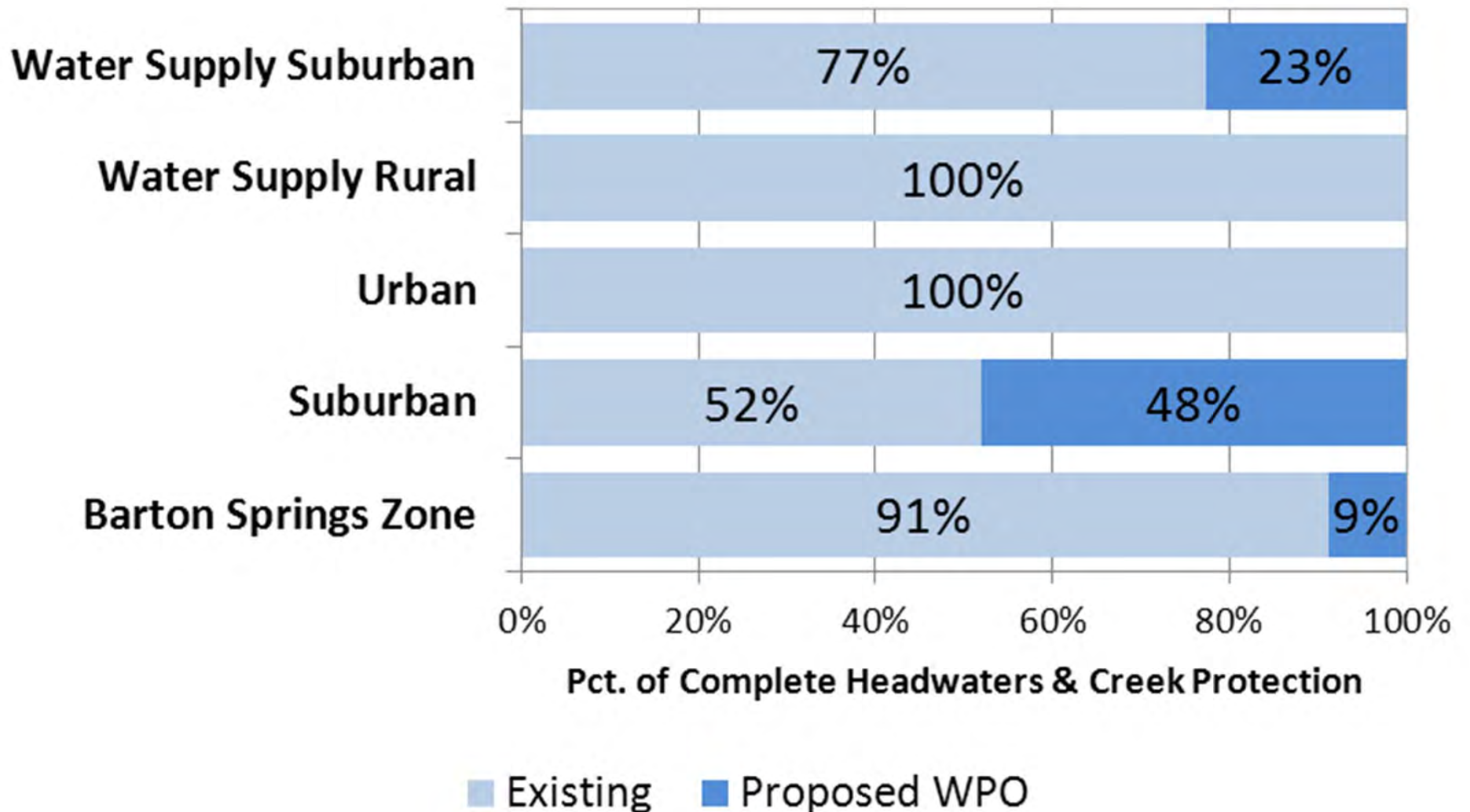
# Protected vs. Unprotected Creeks



# Buffer Extents: Existing vs. Proposed

Watershed Class	Buffer Length (miles)			Pct. Increase
	Existing	Proposed	Net New	
Barton Springs Zone	215	235	21	10%
Suburban	393	755	362	<b>92%</b>
Urban	94	94	0	0%
Water Supply Rural	118	118	0	0%
Water Supply Suburban	59	76	17	29%
Totals	878	1,278	400	46%

# Buffer Extents: Existing vs. Proposed

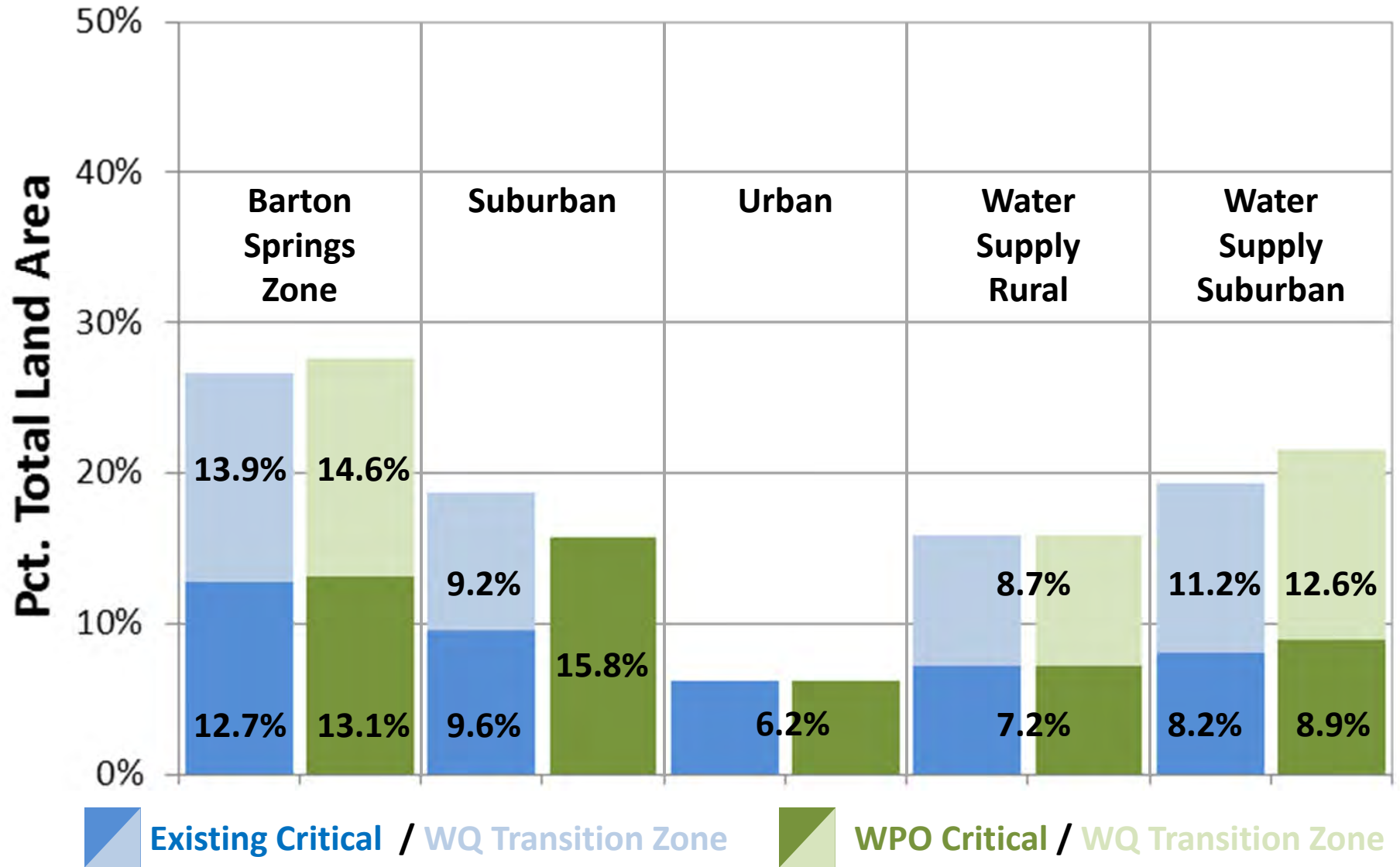


# Total Buffer Area (CWQZ + WQTZ): Existing vs. Proposed

Watershed Class	Buffer Pct. of Total Area			
	Existing		Proposed	
	HW*	Total	HW*	Total
Barton Springs Zone	4.3%	26.7%	5.3%	27.7%
Suburban	0%	18.8%	<b>3.5%</b>	<b>15.8%</b>
Urban	NA	6.6%		
Water Supply Rural	5.0%	15.9%		
Water Supply Suburban	2.4%	19.4%	4.6%	21.6%
Totals	2.8%	18.6%		

\* HW = Headwaters buffer (64-320 acre drainage area streams)

# Area of Existing vs. Proposed Buffers





# Watershed Protection Ordinance: Impact Analysis

- Council resolution\*: “...minimize the impact of any changes on individual and collective abilities to develop land.”
- WPD conducted analysis of properties to evaluate effect of ordinance proposals on:
  - Creek buffer geometry
  - Developable area
  - Allowable impervious cover
- Planning-level estimate; actual impacts will vary site-to-site based on type of development proposal

\* See [Council Resolution 20110113-038](#)

# Impact Analysis: Suburban Watersheds

- Analysis completed for all undeveloped parcels within the Suburban Watersheds
- Examined current buffers with net site area versus proposed buffers with gross site area
- Calculated impact on impervious cover on a tract-by-tract basis (for ~10,000 parcels)
  - assumed maximum allowed impervious cover, area for landscaping and ponds, and limited floodplain modification
  - does not account for critical environmental features, protected trees, or zoning setbacks

# Impact Analysis: Suburban Watersheds

- Analysis for undeveloped properties shows:
  - Minor gain (**4-5%**) in average impervious cover
  - Majority of properties (**70%**) are not affected
  - Majority of affected sites (**80%**) are within a range of +/-25 percent for impervious cover impact
  - Site-specific factors will affect each site differently
- Affordability Impact Statement

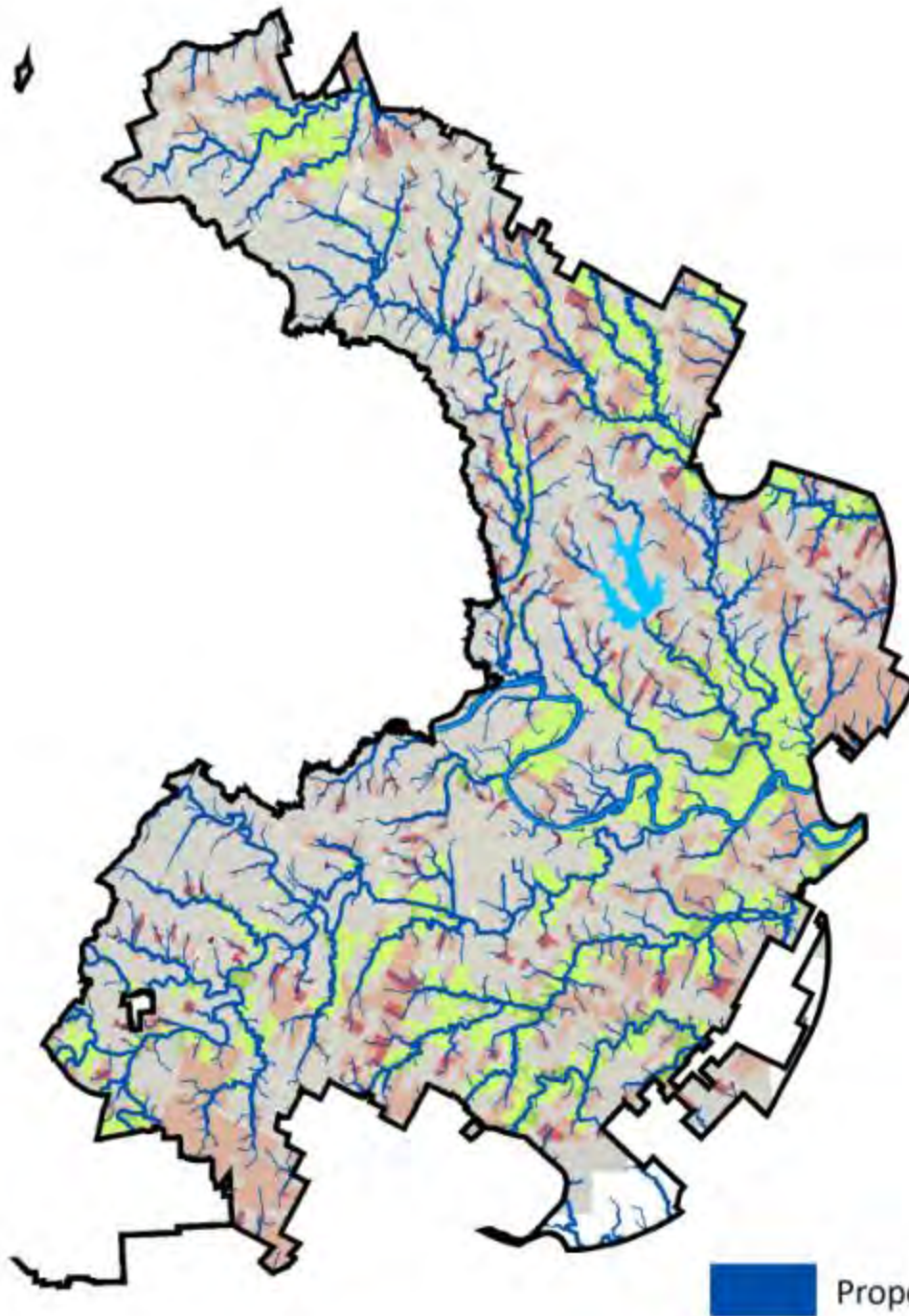
# Impact Analysis: Suburban Watersheds

All undeveloped properties  
Assume net site area

**1,252** properties gain IC  
(33% of land area)

**7,606** see no change  
(29% of land area)

**1,625** properties lose IC  
(38% of land area)



Proposed Creek Buffers

## Impervious Cover Impact



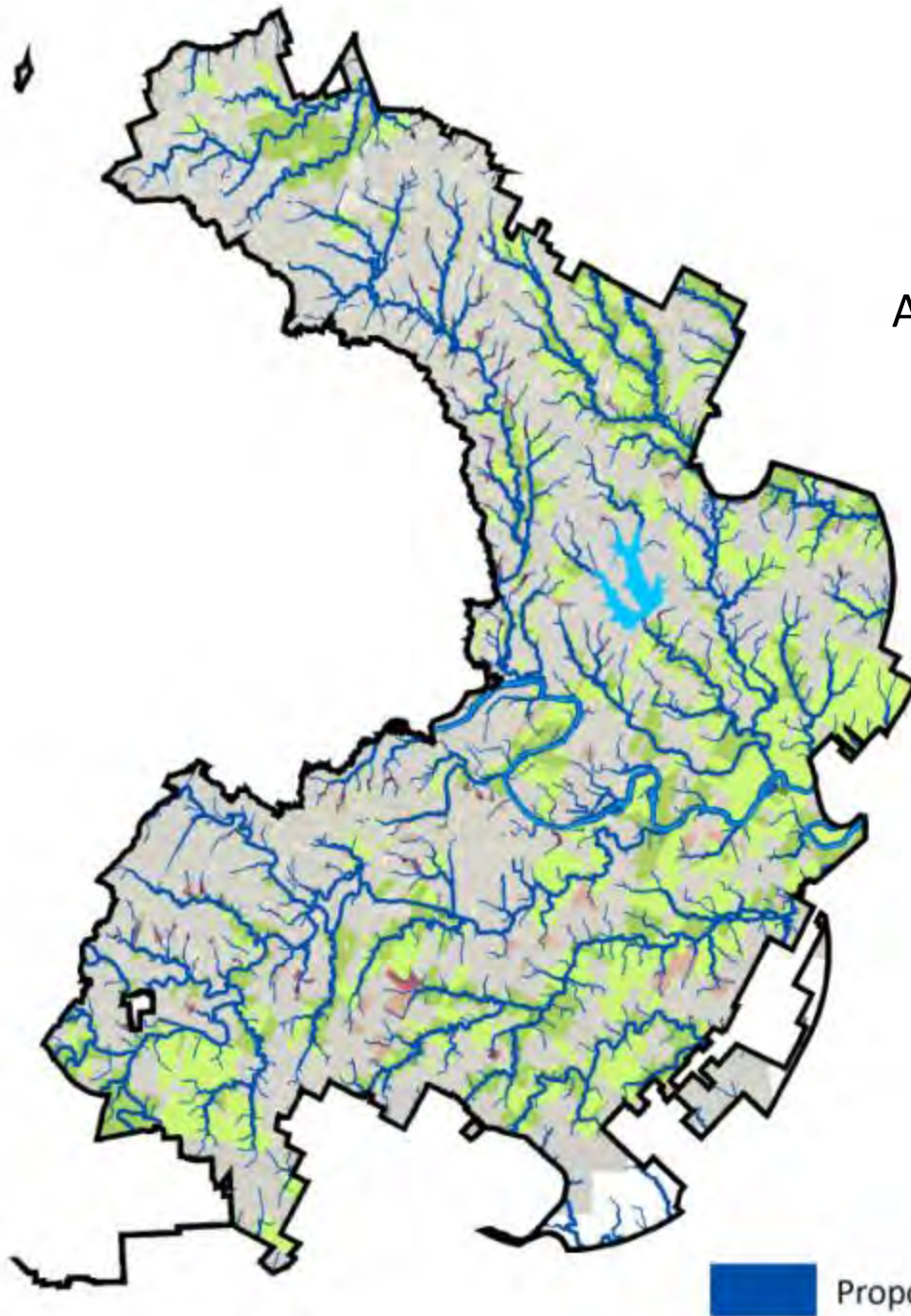
# Impact Analysis: Suburban Watersheds


All undeveloped properties  
Assume same floodplain modification

**2,096** properties gain IC  
(60% of land area)

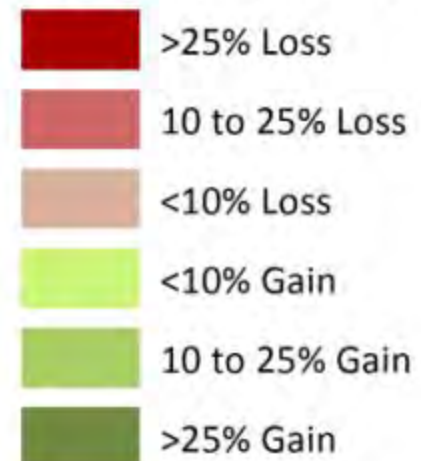
**7,461** see no change  
(35% of land area)

**926** properties lose IC  
(5% of land area)



 Proposed Creek Buffers

## Impervious Cover Impact



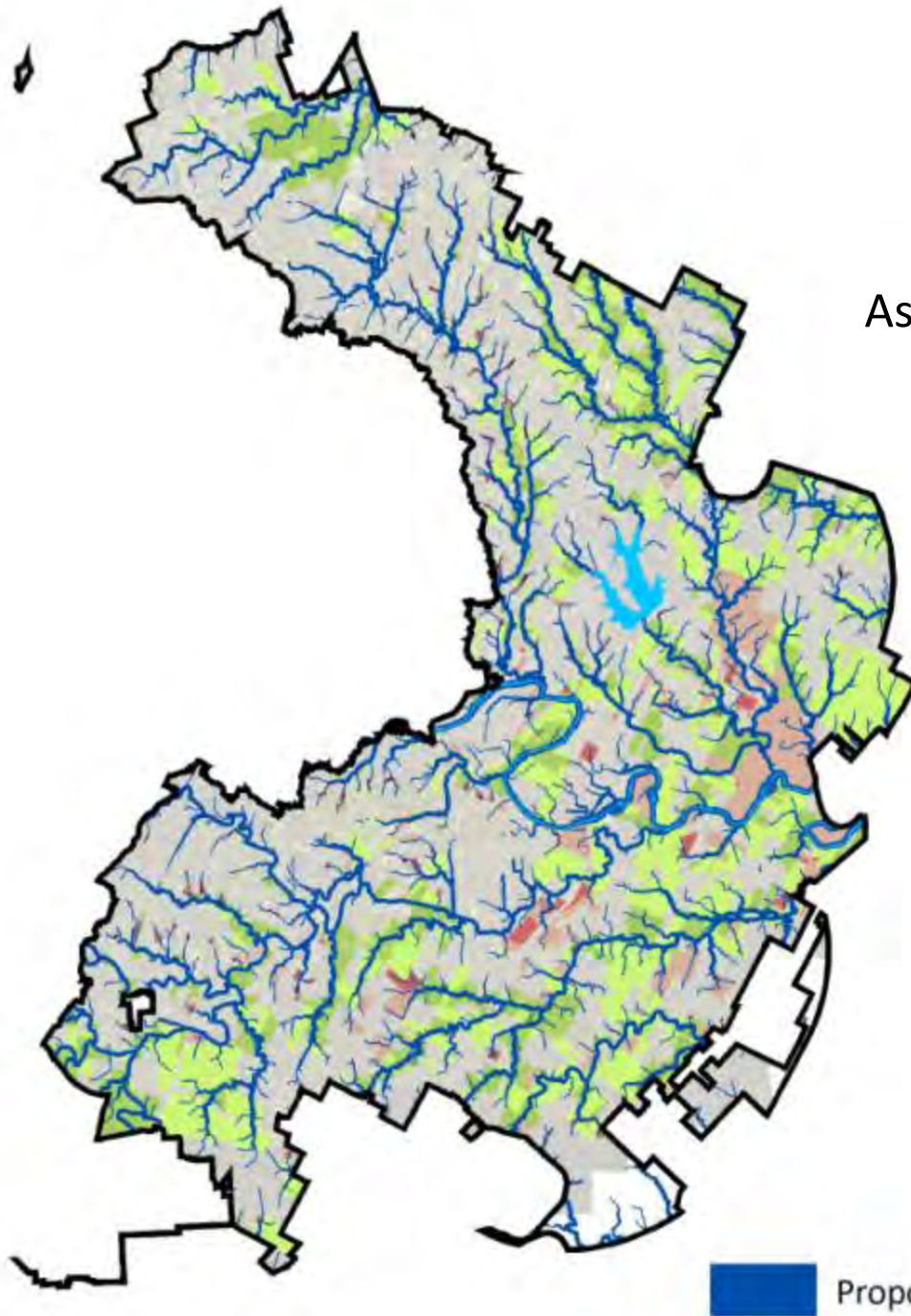
# Impact Analysis: Suburban Watersheds


All undeveloped properties  
Assume reduced floodplain modification

**1,989** properties gain IC  
(54% of land area)

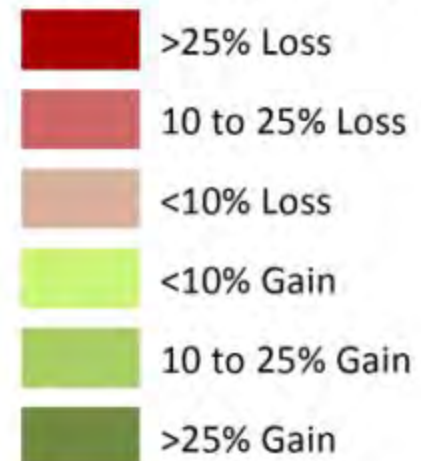
**7,308** see no change  
(34% of land area)

**1,186** properties lose IC  
(12% of land area)



 Proposed Creek Buffers

## Impervious Cover Impact



# Impact Examples

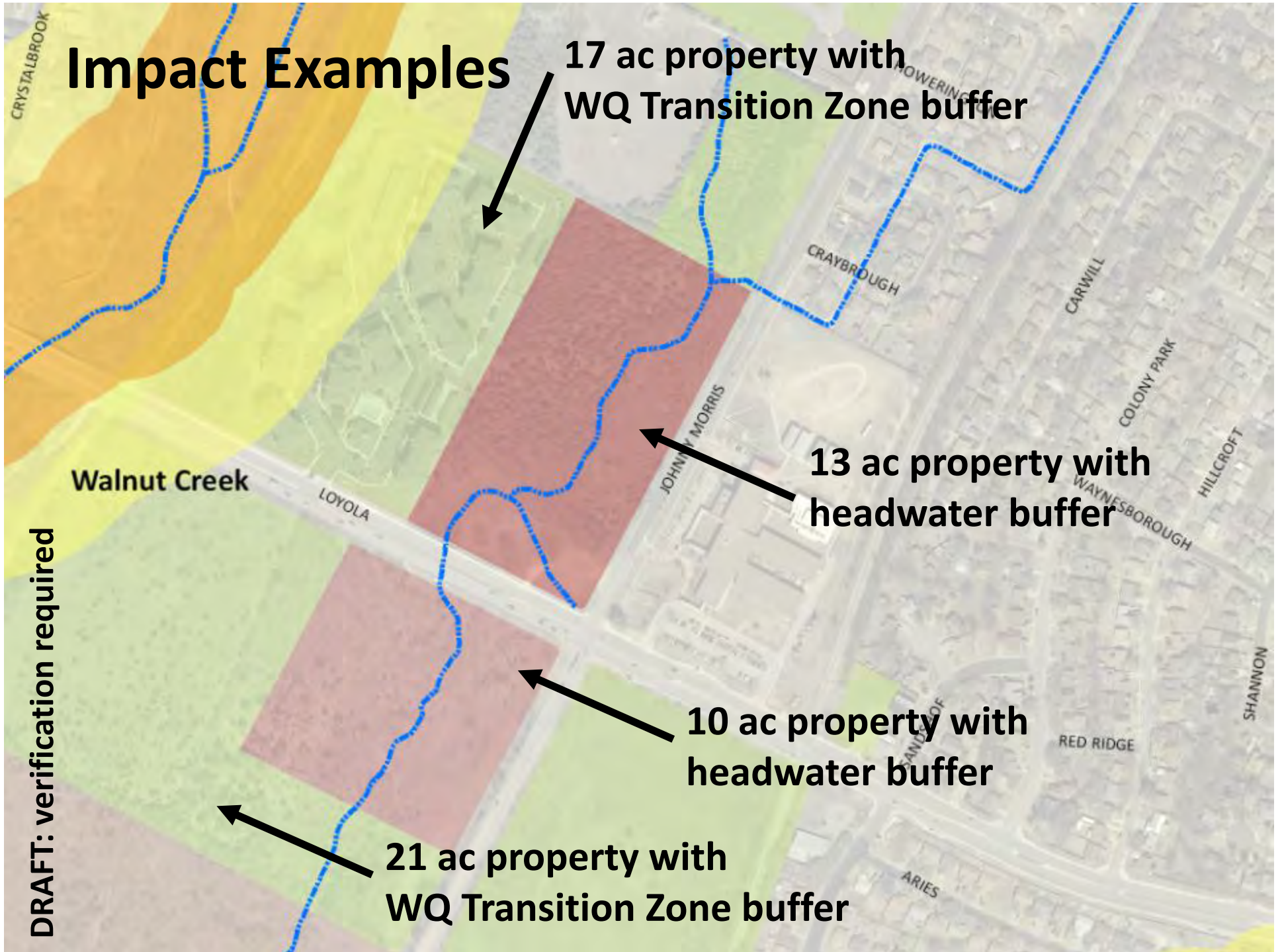
17 ac property with  
WQ Transition Zone buffer

13 ac property with  
headwater buffer

10 ac property with  
headwater buffer

21 ac property with  
WQ Transition Zone buffer

DRAFT: verification required



# Impact Examples

17 ac property with  
WQ Transition Zone buffer:  
18% IC gain

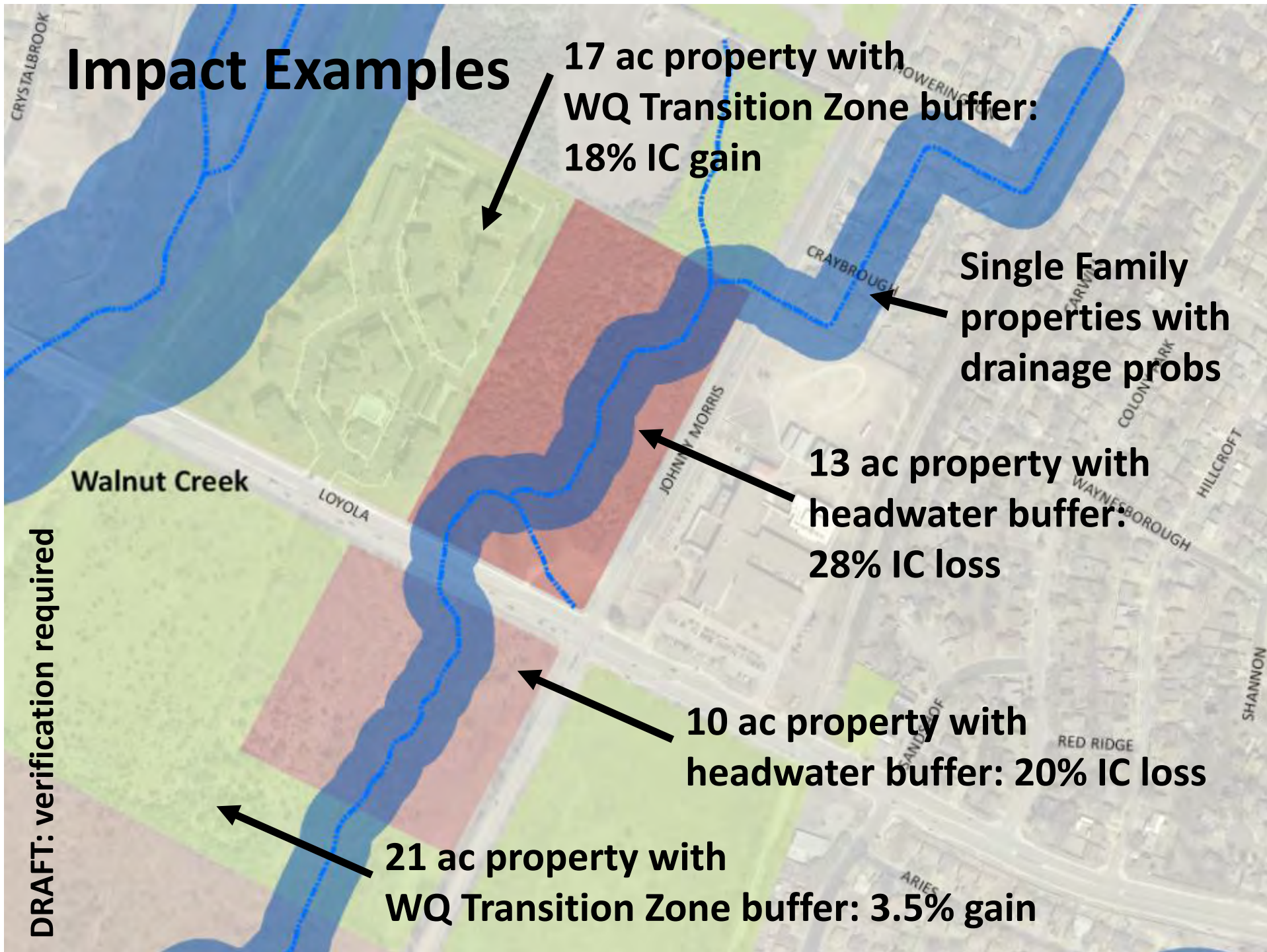
Single Family  
properties with  
drainage probs

13 ac property with  
headwater buffer:  
28% IC loss

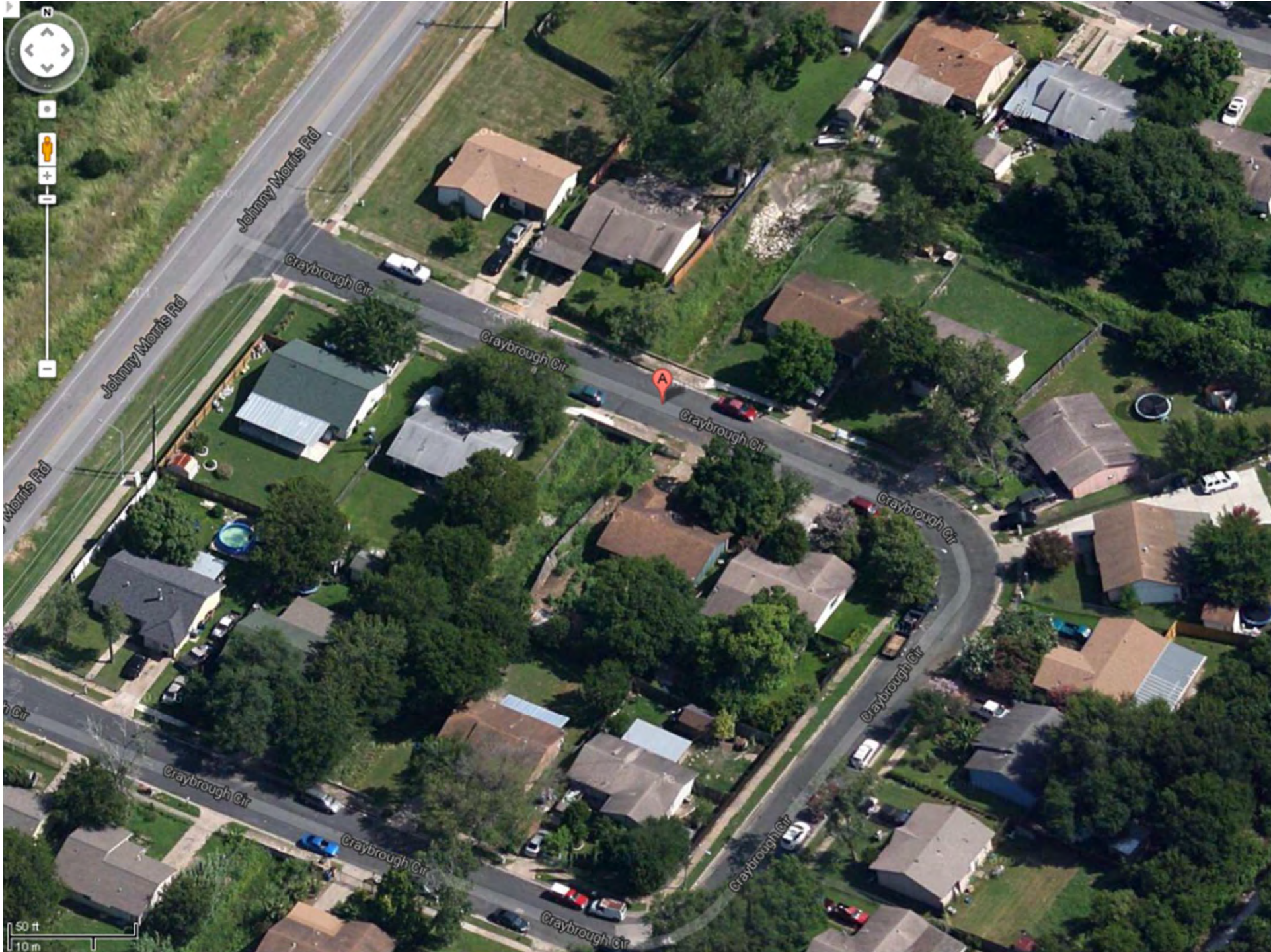
10 ac property with  
headwater buffer: 20% IC loss

21 ac property with  
WQ Transition Zone buffer: 3.5% gain

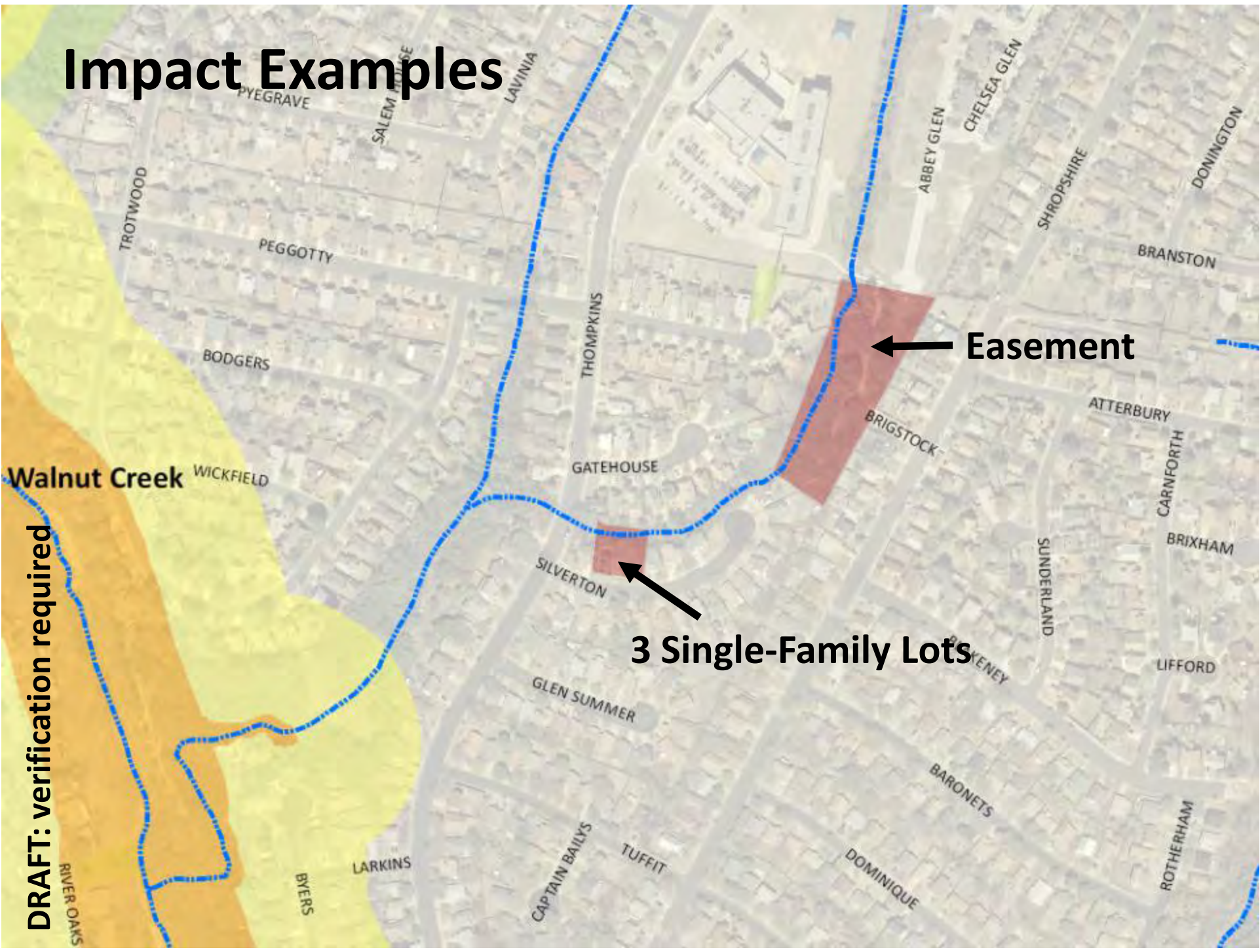
DRAFT: verification required







# Impact Examples

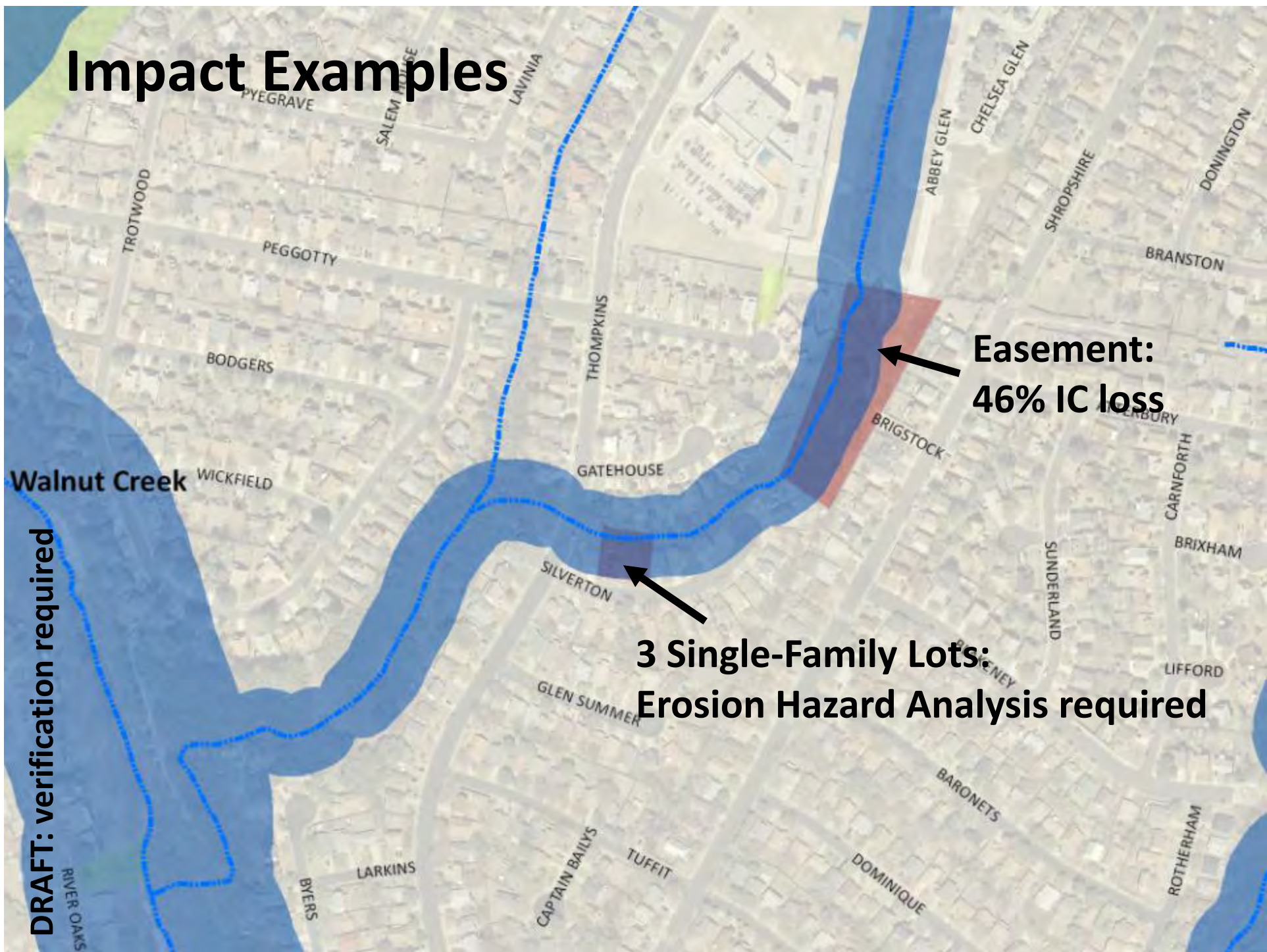


DRAFT: verification required

Easement

3 Single-Family Lots

# Impact Examples

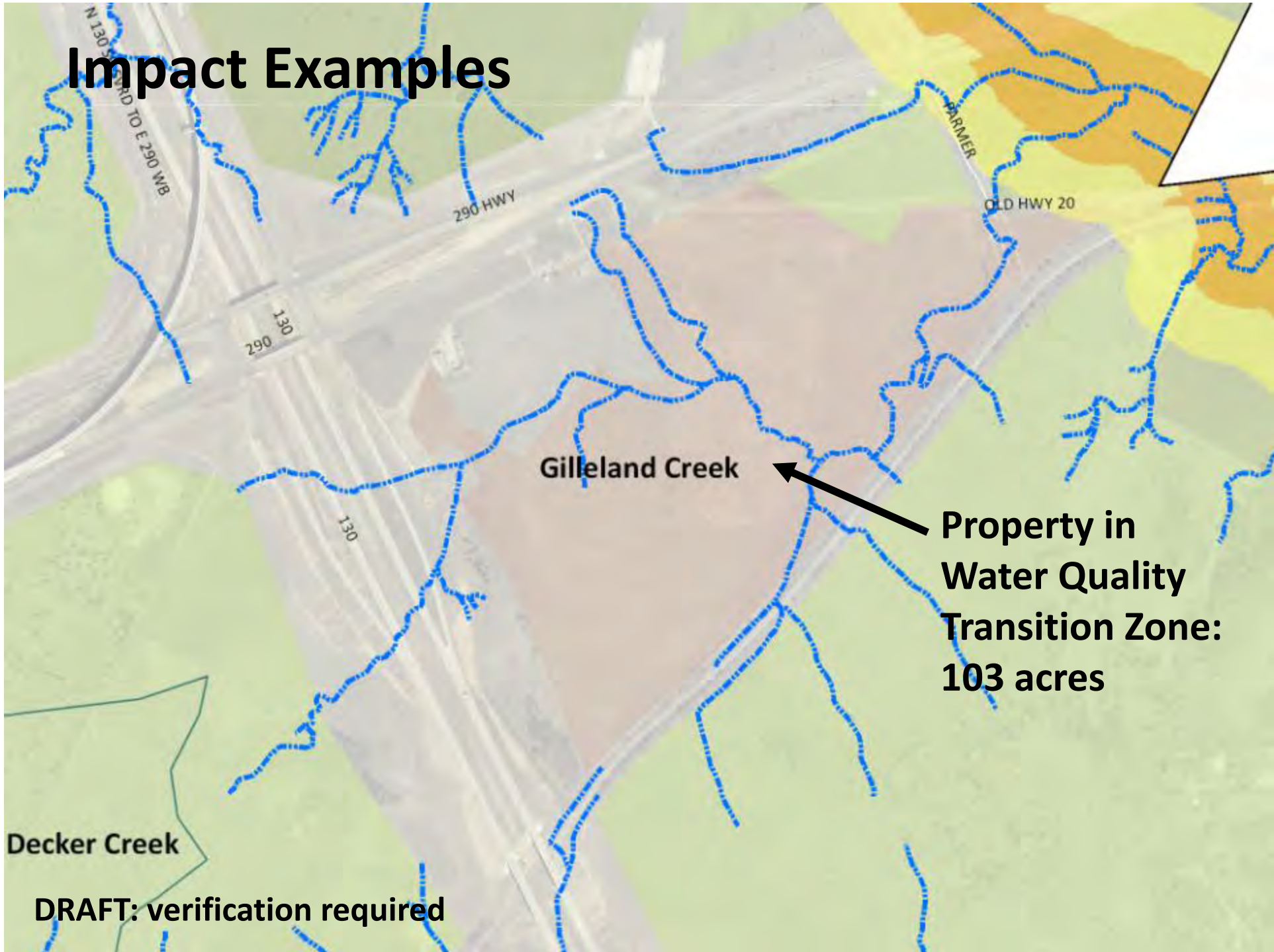


**Easement:  
46% IC loss**

**3 Single-Family Lots:  
Erosion Hazard Analysis required**

**DRAFT: verification required**

# Impact Examples



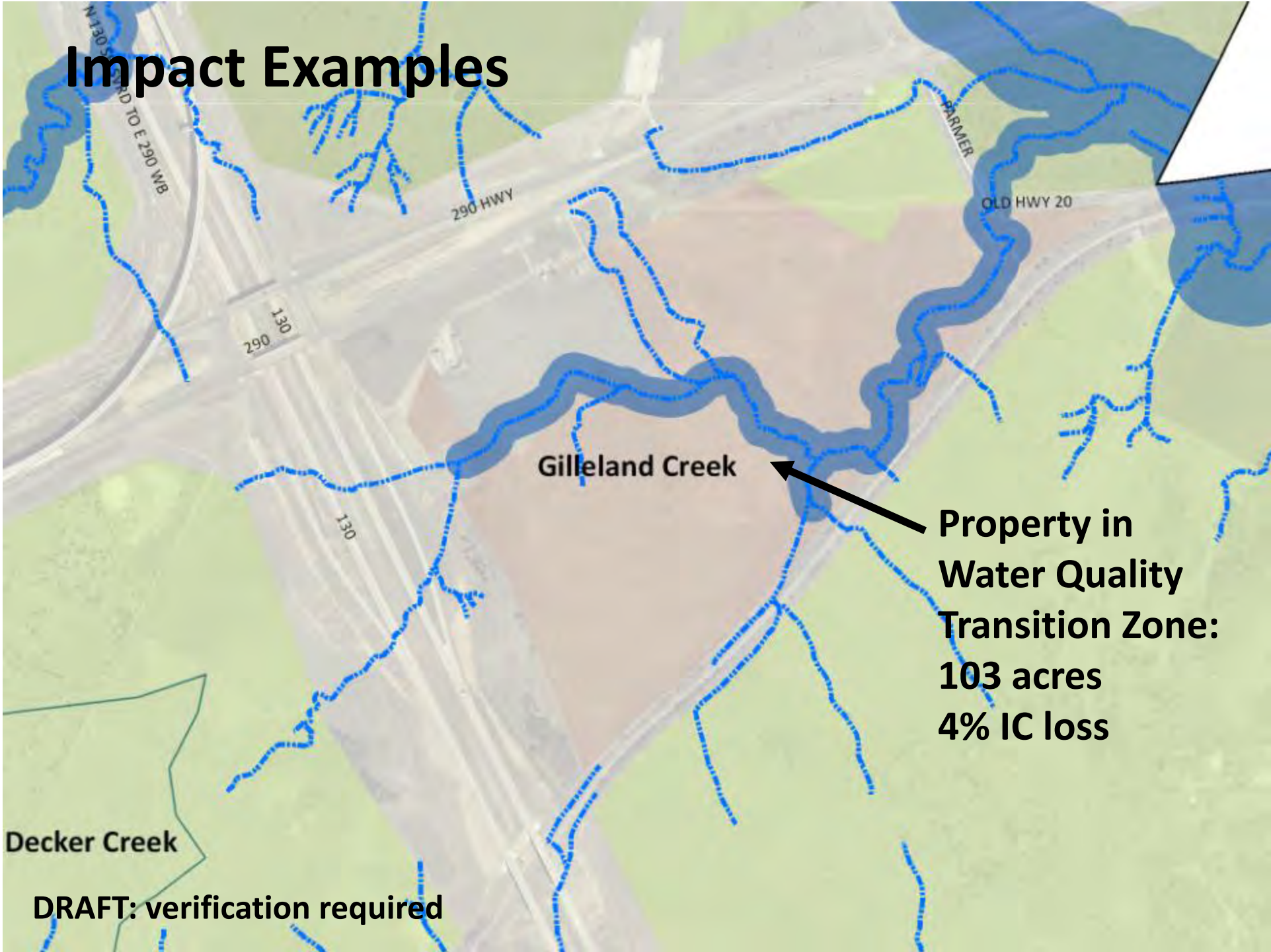
Gilleland Creek

Property in  
Water Quality  
Transition Zone:  
103 acres

Decker Creek

DRAFT: verification required

# Impact Examples



Gilleland Creek

Property in  
Water Quality  
Transition Zone:  
103 acres  
4% IC loss

Decker Creek

DRAFT: verification required