

Can Landscape Changes Affect Water Use

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Agenda

- Background
- Landscape Code Changes
- Study
 - Parameters
 - Results
- Changing Landscapes Through Rebates
 - Results



CO Water & Growth Dialogue

1. Smaller lot sizes (more homes per acre)
2. Single family to multi-family
3. Denser multi-family
4. **Change in irrigable area type (turf limits)**



Landscape Code Changes

- Turf limitations – 2003
 - 40% - 50% high water-use turf in front yards
 - 45% high water-use turf in back yards
- Xeriscape option for front yards
 - 100% low water-use landscape
- Irrigation requirements – pre-2000?
- Chapter 146, Article 14



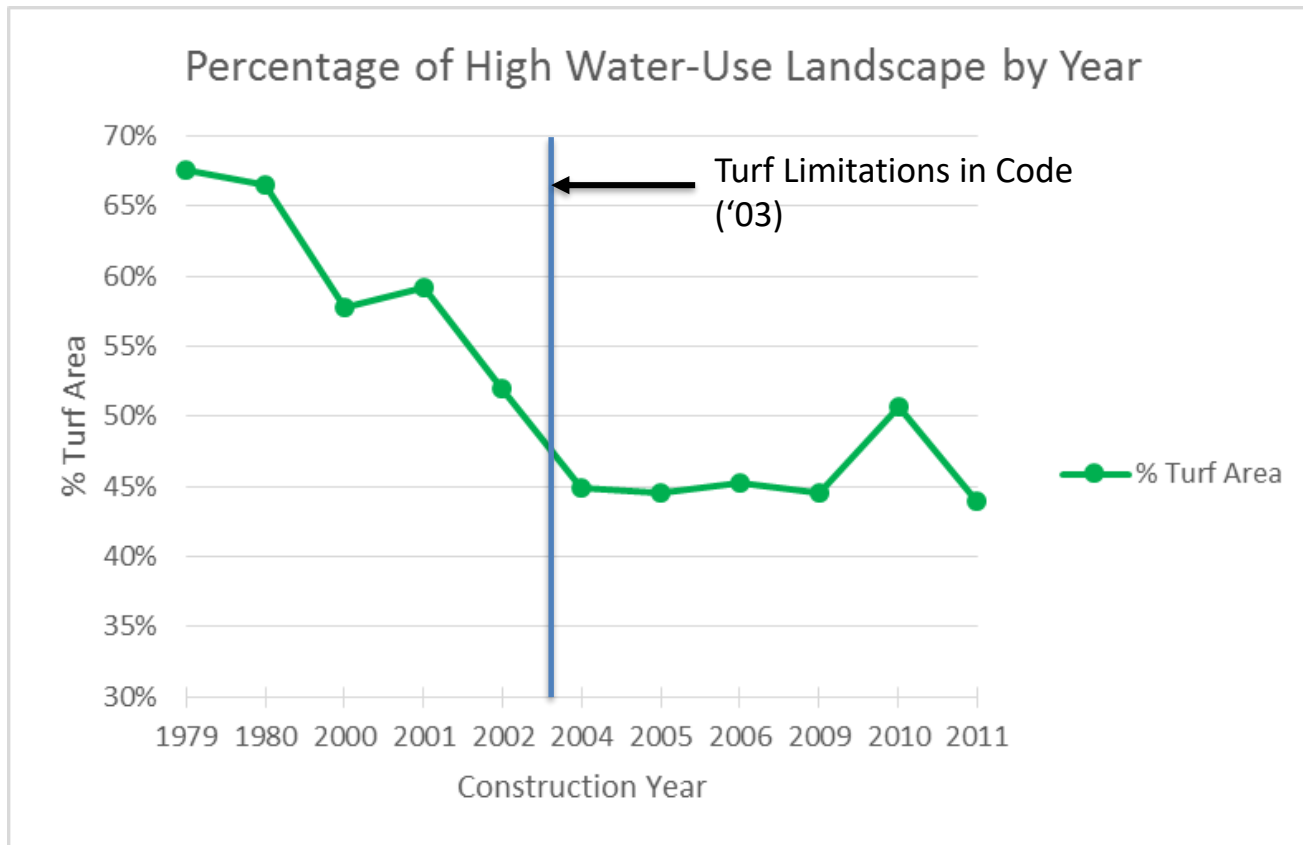
Study

- Mapped cohorts
 - 1979-80, 2001-02, 2004-06, 2009-11
- Statistically significant samples: 150-175/year
- Square footage of irrigable area
 - Cool season turf (high water-use)
 - Remainder classified as low water-use
- Water consumption from 2013 - 2016



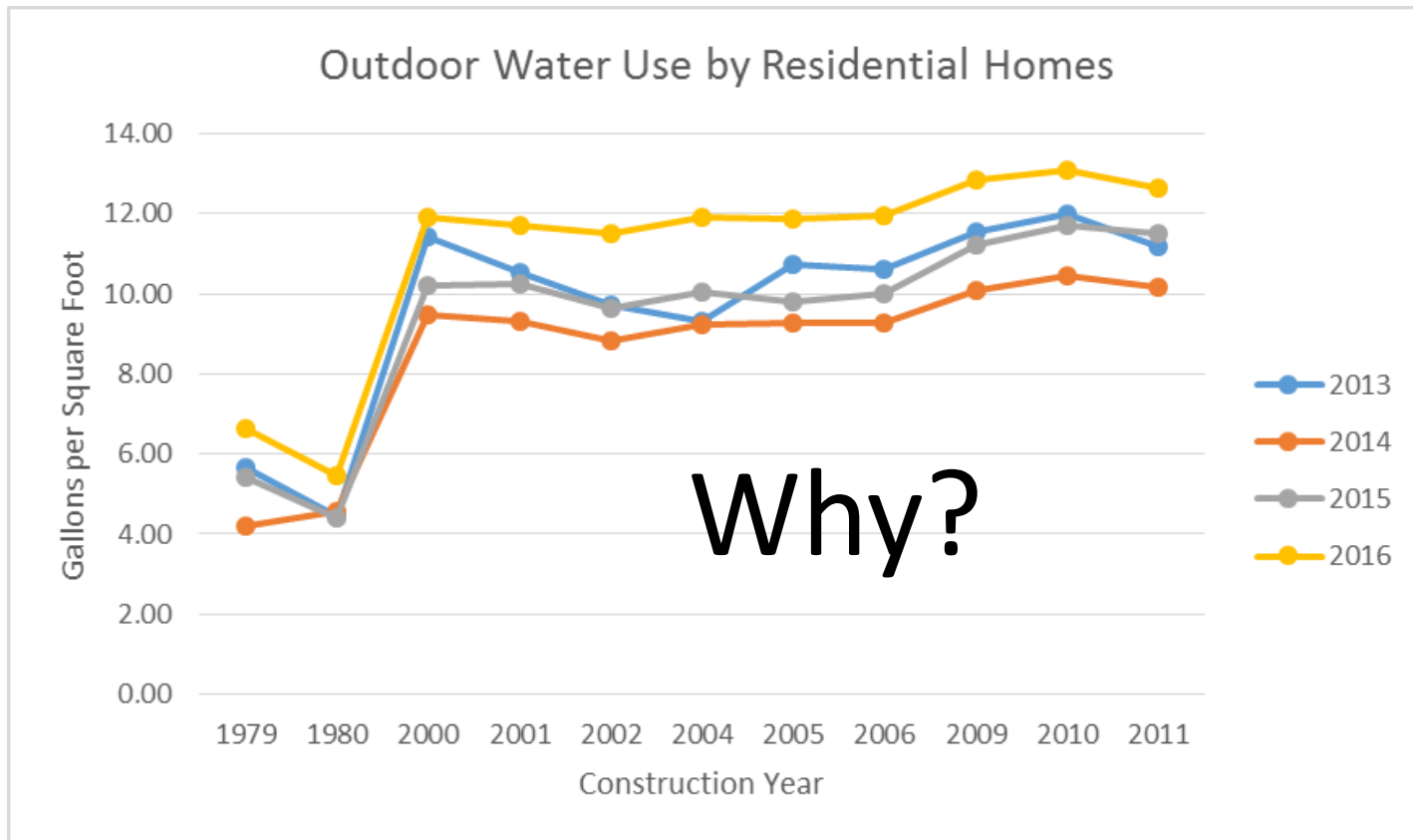
Results

- Good news:



Results

- “Bad” news:



Theories

1. 1979-80 homes may not have irrigation systems
2. Income levels may influence behaviors
3. Education may need to play bigger role with irrigation system requirement



Turf Replacement Program

- In place since 2007
- Replaces cool season turf with low water-use plant material

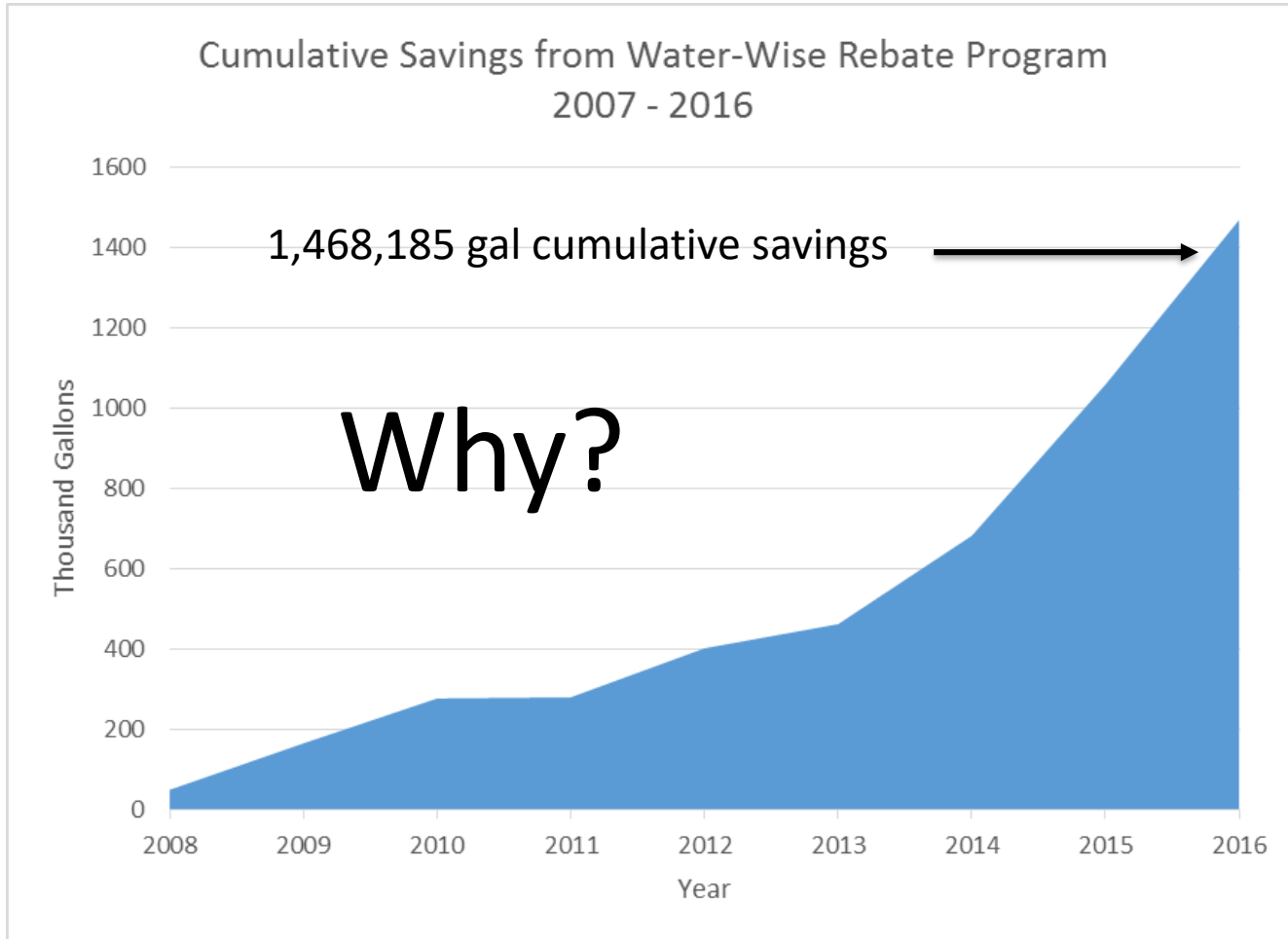


Study

- Looked at participants and neighbors
- 623 customers (2007 – 2015)
- Removed outliers (no water use the year before)
- Normalized for weather



Results



Theory

- Education
 - Classes, requirements, designs
- Motivated customers



Thoughts

- Landscape code can be effective
- Education is needed
 - Consider more outreach
 - Focus on new homeowners?
- Informed customers make the difference



Questions?

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