

An Urban Index of Riparian Integrity

PRESENTER:

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BACKGROUND: Cities need city-scaled tools to assess riparian function that are easily reproducible and practical. Austin has settled on a very simplistic model that provides detailed grid based results that can quickly and objectively rank priorities and provide for spatial comparisons.

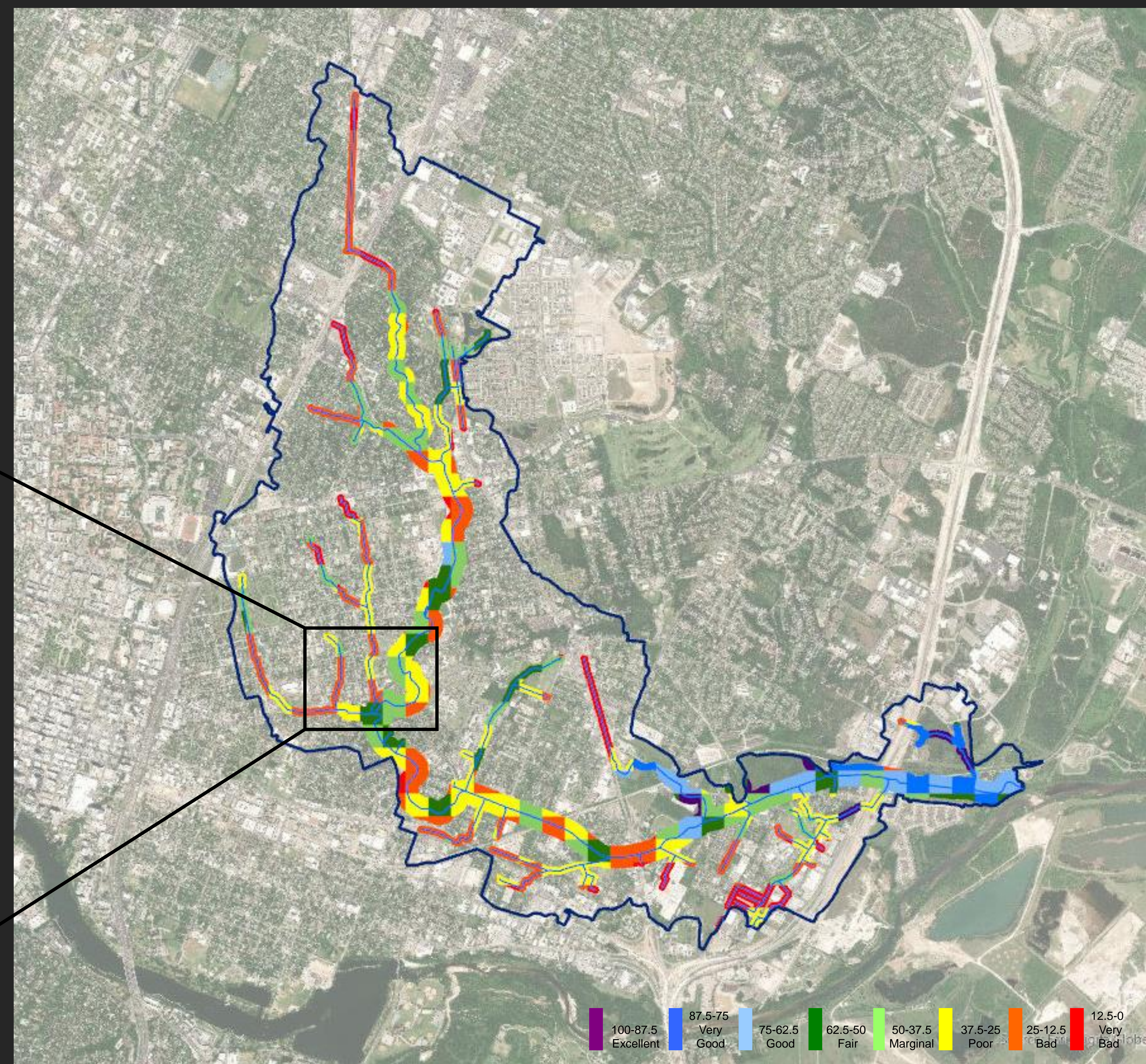
METHODS

1. Gather your GIS/Land Cover: Canopy, impervious, and pervious cover (no canopy). (canopy over IC doesn't count)
2. Define your buffer widths (???)
3. Define your buffer units: we used a 600 ft grid.
4. Calculate % land cover for each unit
5. Apply your scoring criteria

$$IRI = (\text{Pervious} \times 55 + \text{Canopy} \times 100) \times (1 - IC)$$

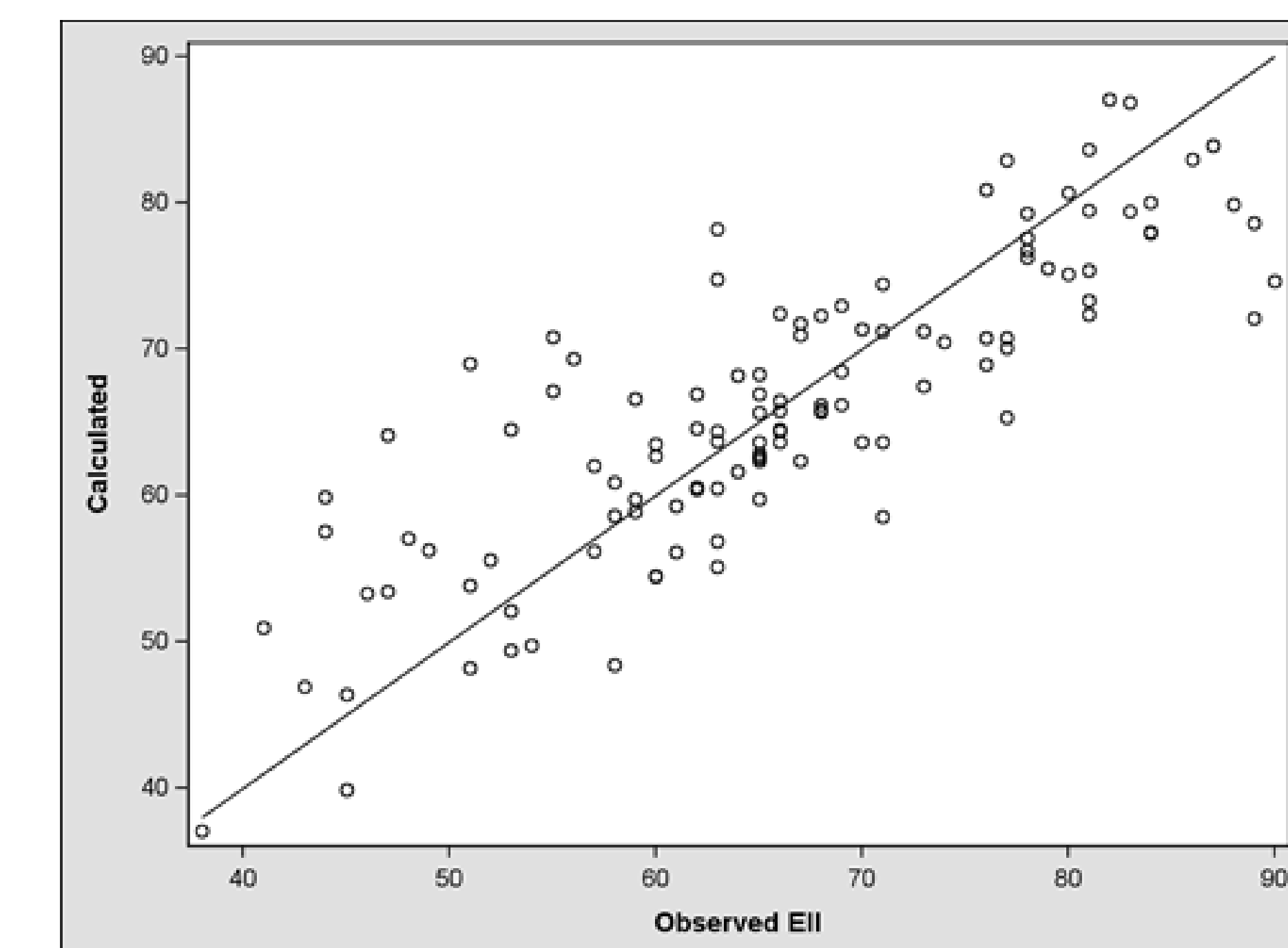


Basic GIS and some advanced math provide a practical tool for assessing urban riparian buffer function and prioritizing restoration.



Why?

- Calculate gap to goals (i.e. Good Score, 67.5).
- Report out riparian scores at any scale (sub-shed, watershed, council district, etc).
- Rank low scores or priorities at any scale.
- Identify funding needs (passive vs. active restoration).
- Visually present buffer quality at any scale, and why.
- Use as stream health predictor variable



(Scan for previous work on this topic)

