

Rainscaping to Reduce our Stormwater Footprint



**Plaster Creek Stewards
Summer Workshop**

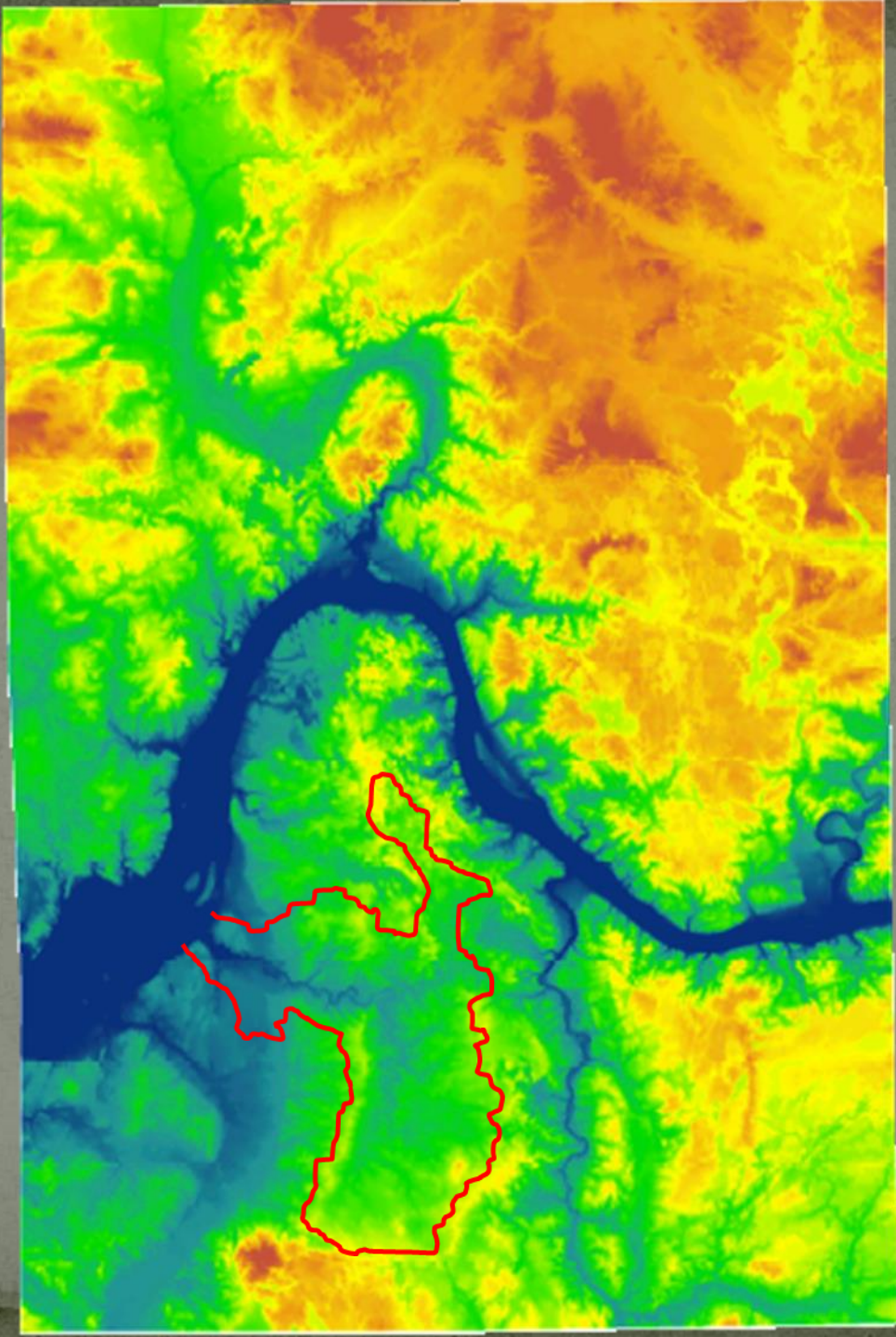
June 11, 2013

Michael Ryskamp and David Warners



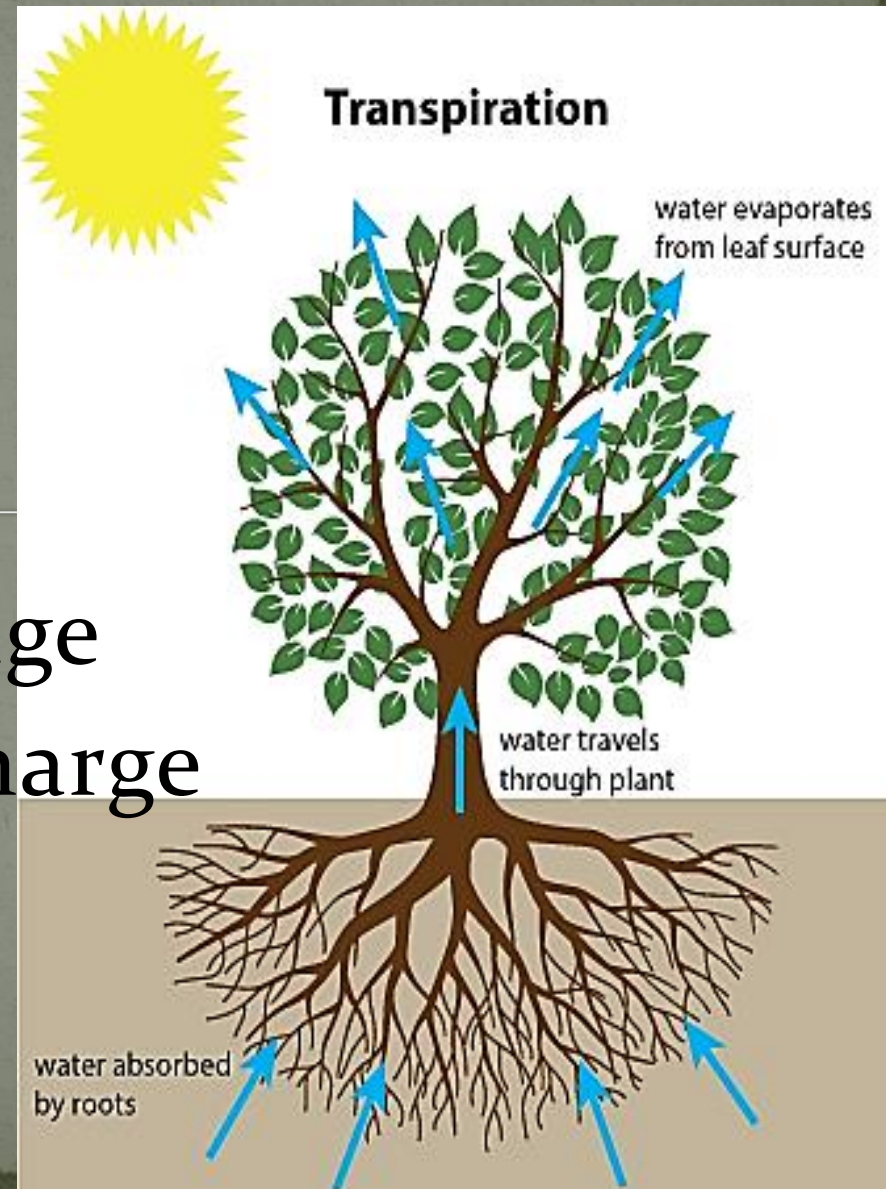




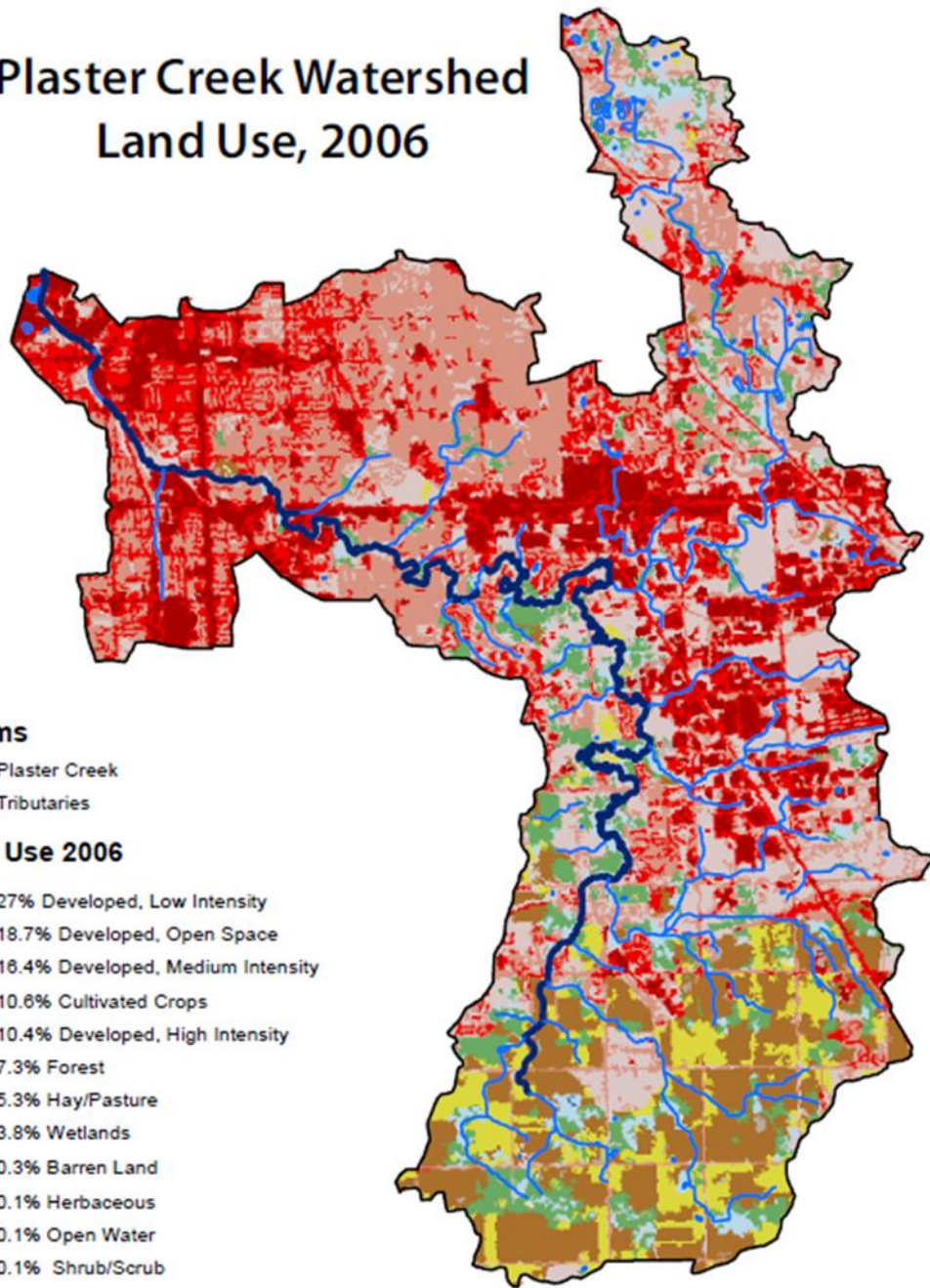


Natural Rainwater Processing

- Interception
- Evaporation
- Infiltration
- Transpiration
- Groundwater storage
- Groundwater discharge
- (Surface Runoff)



Plaster Creek Watershed Land Use, 2006



Urban Rainwater Processing

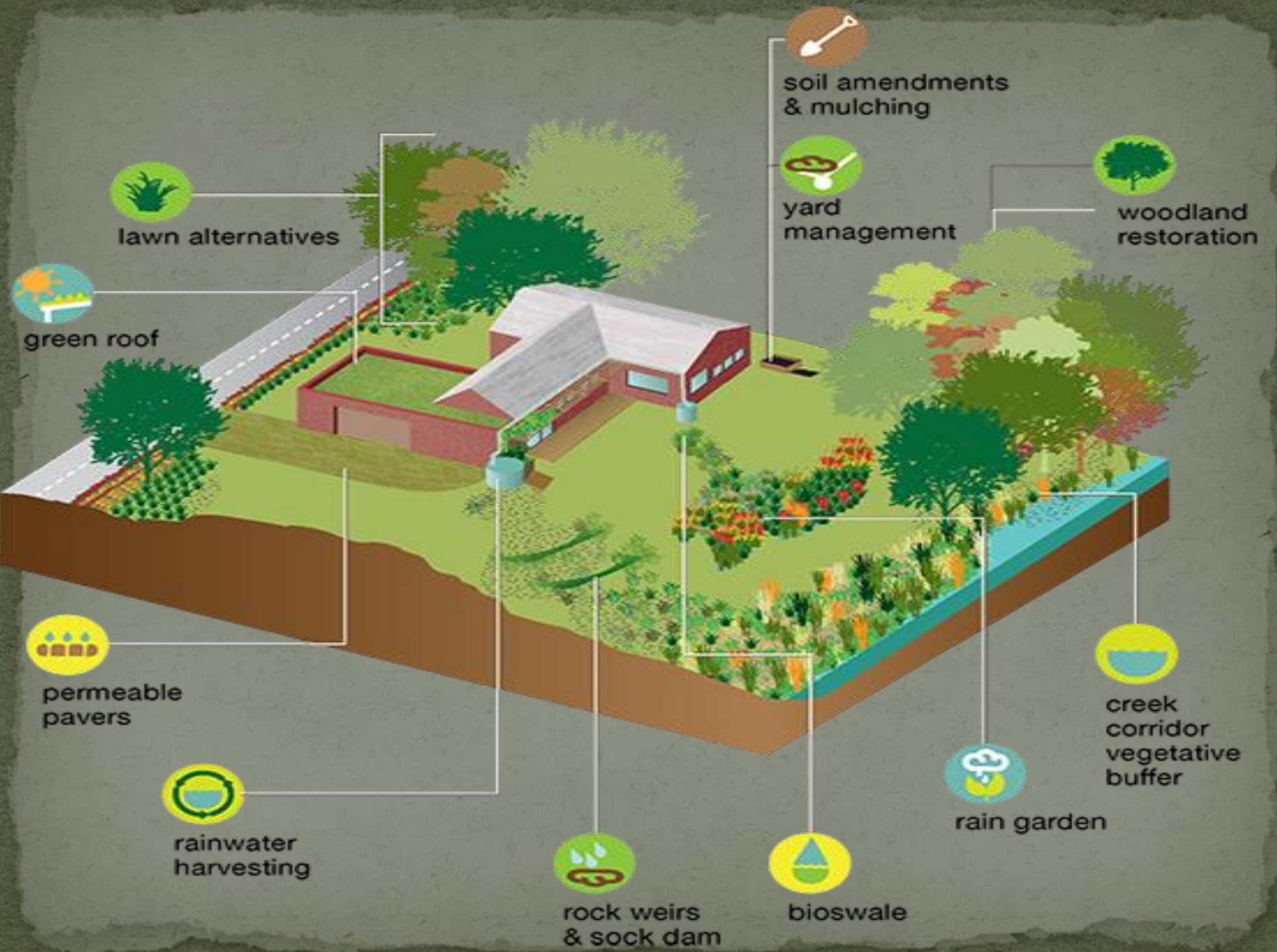
- Interception
- Evaporation
- Infiltration
- Transpiration
- Groundwater storage
- Groundwater discharge

- **Surface Runoff!**



Stormwater Footprints and Rainscaping

- **Stormwater Footprint** – Percentage of rainfall that flows off a parcel of land (parking lot \approx 100%)
- **Rainscaping** – managing landscapes of homes, businesses, churches, schools, etc. in ways that minimize the amount of stormwater runoff
- **Numbers to Consider:**
 - A one inch rainfall = 27,154 gallons/acre
 - Grand Rapids mean annual rainfall = 37.13 in
 - That equals 1,008,228 gallons/acre/year!!!
- **Possible Future Stormwater Utility**





**WHEN IT RAINS
IT DRAINS**



Reduce runoff

SLOW IT DOWN



SPREAD IT OUT



SOAK IT IN!!!



For beautiful solutions to water pollution, visit

RainScaping.org

Rainscaping examples

Three case studies that range from *bare bones*
to *complete rainwater makeover*

Rainscaping in Jenison (in process)



Along Plaster Creek

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Final thoughts

- On aesthetics...
- Personal choices, policies
- Maintenance
- Costs pay off over time

