Storm to Shade
City of Tucson Green Stormwater Infrastructure Program

Water Resources Research Center
Working with Nature
July 11, 2023

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What is GSI?
Green Stormwater Infrastructure (GSI) directs stormwater runoff from streets, parking lots, and rooftops into landscaped areas where it infiltrates the soil to support vegetation.

Find GSI at
- Parks
- Greenways
- Neighborhood streets
- Bike boulevards
- Public parking lots
- Traffic circles

climataction.tucsonaz.gov
“Wet” Water Production for Tucson Water Service Area (1940-2019)

- Groundwater
- Colorado River Water
- Remediated Groundwater
- Reclaimed Water
- Rainwater Harvesting (Unmetered)

Water Production for TW Service Area (Acre-Feet)

Year:
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000
- 2010
- 2019

Rainwater/Stormwater Harvesting (Unmetered)
Groundwater
Colorado River Water
Remediated Groundwater/AGP
Reclaimed Water

A proud part of the City of Tucson
Institutionalizing Rainwater Harvesting

Recent Tucson Timeline history: Collaborative inter-agency work

- Dr. Riley starts a Water Catchment Group
- Watershed Management Group formed
- UArizona starts Rainwater Harvesting class
- Tucson-Pima Co Water/Wastewater Study (WISP)
- Regional LID/GI Working Group formed
- M&C Adopt Commercial Rainwater Harvesting Ordinance
- M&C Approve Water Conservation Fee
- Transportation Dept. develops curb cut standards
- Tucson Regional LID/GI Workshop
- PAG passes GI & Economic Health Resolution
- WISP Action Guidance Case Studies
- Regional LID/GI & Equity Study
- PAG passes Green Infrastructure Resolution
- Plan Tucson: COT General & Sustainability Plan
- PAG passes GI & Economic Health Resolution
- One Water Workshop UA/TW/American Rivers
- GILE Green Infrastructure & Equity Study
- M&C Approve Water Conservation Fee
- PC Stormwater Harvesting Systems Amendment
- Pima Prosper: PC General Plan
- Pima County Stormwater Detention/Retention Manual
- COT hires GSI Program Staff
- M&C approves TW GSI Fee for city residents
- Pima County BOS/Dept approves GSI Plan
- Pima County Administrator approves GI Plan
- COG Stormwater Harvesting Program
- One Water Workshop UA/TW/American Rivers
- National Green Infrastructure Leadership Exchange

Color Key
- Community/UArizona activity
- Tucson region LID/GI activity
- Regional PAG activity
- COT Transportation action
- COT M&C action
- Regional PAG activity
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Conservation and Stormwater Resources

Conservation
- Water Audits
- Education
- Rebates
- TCB GSI Mini-Grants

Storm to Shade
- Capital
  - $300K x 6 (per ward per year)
  - $300K Mayor’s discretion per year
- Maintenance
  - $300K per year

Storm to Shade is funded by a fee on City of Tucson utility bill based assessed at .13 per CCF averaging $1 per month for the average household.
Tree Equity Score evaluates data from each neighborhood’s:

- Existing tree canopy
- Population density
- Surface temperature
- Race
- Income
- Employment
- Age
- Health

High priority for GSI

Highest priority for GSI
Hiring Maintenance Contractors
Everyone gets the same support regardless of what is needed.

Some get more support while others get less, creating disparity.

Everyone gets the support they need

Cause of inequity is addressed. Systemic barrier has been removed.
Storm to Shade Capital Projects
Thank you!

Questions?

https://climateaction.tucsonaz.gov/pages/gsi
THE SEVEN EQUITY GOALS

1. Internal Readiness
2. Centering Community
3. Siting + Investment
4. Benefits-Driven Project Development
5. Economic Stability
6. Preventing Displacement
7. Programs + Policies