

City of Prescott
**Council Subcommittee on
Water Issues**



July 1, 2025 | 9:30 AM
201 N Montezuma Street
Council Chambers
Prescott, AZ 86301

AGENDA

The following Agenda will be considered by the **Prescott Council Subcommittee on Water Issues at a Regular Subcommittee Meeting** pursuant to the Prescott City Charter, Article II, Section 13. Notice of the meeting is given pursuant to Arizona Revised Statutes, Section 38-431.02. One or more members of the Council may be attending the meeting through the use of a technological device.

Viewing & Participation

This meeting may be viewed on Channel 64, Facebook Live or on the City's website: [City of Prescott Live Meeting Feed](#)

Public comments for Council may be submitted through the City website: [Public Comment Form](#)

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **DISCUSSION & ACTION ITEMS**
 - A. Approval of the June 3, 2025 Council Subcommittee on Water Issues Meeting Minutes.
Recommended Action: MOVE to approve the minutes as presented
 - B. Presentation & Discussion Regarding the 2022 Water Management Policy - Current Residential & Non-Residential Water Budget Overview for January 1, 2025 through June 19, 2025.
Recommended Action: This item is for discussion only. No formal action will be taken.
 - C. Presentation & Discussion Regarding an Update on the Long-Term Water Management Plan.
Recommended Action: This item is for discussion only. No formal action will be taken.
 - D. Presentation & Discussion Regarding an Update on City Lake Treatments & Willow Lake Management Plan.
Recommended Action: This item is for discussion only. No formal action will be taken.

- E. Presentation & Discussion Regarding Green Stormwater Infrastructure.
Recommended Action: This item is for discussion only. No formal action will be taken.

4. GENERAL ANNOUNCEMENTS FROM STAFF

5. ADJOURNMENT

Upon a public majority vote of a quorum of the City Council, the Council may hold an executive session, which will not be open to the public, regarding any item listed on the agenda but only for the following purposes:

- (1) Discussion or consideration of personnel matters (A.R.S. §38-431.03(A)(1));
- (2) Discussion or consideration of records exempt by law (A.R.S. §38-431.03(A)(2));
- (3) Discussion or consultation for legal advice with the city's attorneys (A.R.S. §38-431.03(A)(3));
- (4) Discussion or consultation with the city's attorneys regarding the city's position regarding contracts that are the subject of negotiations, in pending or contemplated litigation, or in settlement discussions conducted in order to avoid litigation (A.R.S. § 38-431.03(A)(4));
- (5) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations with employee organizations (A.R.S. §38-431.03(A)(5));
- (6) Discussion, consultation or consideration for negotiations by the city or its designated representatives with members of a tribal council, or its designated representatives, of an Indian reservation located within or adjacent to the city (A.R.S. §38-431.03(A)(6));
- (7) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property (A.R.S. §38-431.03(A)(7)).

CERTIFICATION OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Prescott City Hall on 6/26/25 at 11:00 a.m. in accordance with the statement filed by the Prescott City Council with the City Clerk.

Sarah M. Siep

Sarah M. Siep, City Clerk



TO: MAYOR AND CITY COUNCIL
AGENDA: July 1 Water Issues Subcommittee Meeting
DATE: July 1, 2025
DEPT: City Clerk
ITEM #: 3.A
SUBJECT: Approval of the June 3, 2025 Council Subcommittee on Water Issues Meeting Minutes.

ITEM SUMMARY

This item is for the approval of the minutes from the June 3, 2025 Council Subcommittee on Water Issues meeting. Staff recommends approval of the minutes as presented.

BACKGROUND

None.

FINANCIAL IMPACT

None.

RECOMMENDED ACTION

MOVE to approve the minutes as presented

ATTACHMENTS

1. June 3, 2025 WIS Minutes

City of Prescott
Council Subcommittee on Water Issues



June 3, 2025 | 9:30 AM
201 N Montezuma Street
Council Chambers, 1st Floor
Prescott, AZ 86301

MINUTES

1. CALL TO ORDER

Member Goode called the meeting to order at 9:32 a.m.

2. ROLL CALL

Phil Goode - Member
Lois Fruhwirth - Member
Ted Gambogi - Member (Absent)

3. DISCUSSION & ACTION ITEMS

A. Selection of Replacement Chair for the Subcommittee on Water Issues to Serve Through November 2025.

Member Goode stated that he would be happy to serve as Chair and has been involved in water issues for a number of years.

MOTION BY MEMBER GOODE TO APPOINT HIMSELF AS REPLACEMENT CHAIR; SECONDED BY MEMBER FRUHWIRTH: PASSED (2 - 0)

B. Approval of the April 1, 2025 Council Subcommittee on Water Issues Meeting Minutes.

MOTION BY MEMBER FRUHWIRTH TO APPROVE THE MINUTES AS PRESENTED; SECONDED BY CHAIR GOODE: PASSED (2 - 0)

C. Presentation & Discussion Regarding the 2024 Annual Water Withdrawal & Use Report.

Water Resource & Environmental Services Manager Brian Ruiz provided a presentation to the Subcommittee regarding the 2024 Annual Report including city water supplies and resources that are reported to ADWR as part of the Prescott AMA.

Water Supplies:

- * Surface Water
- * Wastewater
- * Production Wells

Mr. Ruiz stated that an acre foot of water is equal to 325,851 gallons of water.

Production Wells:

- * Chino Valley - five
- * Airport - three

* Potable Deliveries - 7,292 AF total pumped, 6,580 AF total deliveries and 712 AF loss/unaccounted

Member Fruhwirth asked if this timetable is this fiscal or calendar year and if 9.7% loss/unaccounted for is acceptable.

Mr. Ruiz confirmed that it is calendar year, the loss is higher than it has been in previous years so staff is working with Water Operations to find out how that happened. But up to 10% is acceptable.

Treated Effluent:

* Three facilities - Airport Water Reclamation Facility, Sundog Wastewater Treatment Plant and Hassayampa Wastewater Treatment Plant

* Total Treated - 4,676 AF

* Total Recharge - 2,407 AF

* Loss & Unaccounted- 740 AF

Chair Goode stated that he would like to see water used for construction purposes measured in some way. If it is a large number of potable water being used he would like to see a policy for that developed.

Member Fruhwirth agreed.

Surface Water:

* Sources - Watson Reservoir and Willow Reservoir

* Recharge period April 1 through November 31

* Surface Water Recharge - 1,161 AF

* Last year reported almost 3,900 AF so it is significantly less this year which is the trend annually

Underground Storage Facility:

* Sources - Watson, Willow and Treated Effluent

* Surface Water - 1,161 AF

* Effluent Recharge - 2,407 AF

* Total Recharge - 3,568 AF

Use of Recharge:

* Offset groundwater pumping

* Surface water - must be recovered the year recharged

* Treated effluent - can be recovered or converted to long term storage credits (LTSC) after effluent from Prop400 areas are subtracted to include in a non-recoverable account.

* For 2024, treated effluent was split: 1200 AF recovered and 1207 AF LTSC

Annual Report Summary:

* Total Withdrawal fees paid to ADWR - \$9,861.06 at \$2/AF for a total of 4,931 AF

* Funds are made available through grants

Deliveries:

- * Single Family Residential - 57%
- * Commercial - 18%
- * Multi-Family Residential - 10%
- * Government - 6%
- * Turf Under 10 Acres - 4%
- * Other Metered - 1%
- * Construction - 1%
- * Turf Over 10 Acres - 1%
- * Other Unmetered - 1 %

This item was for discussion only, no formal action was taken.

- D. 2022 Water Management Policy Discussion - Current Residential & Non-Residential Water Budget Overview for January 1, 2025 through May 19, 2025. Mr. Ruiz provided a presentation regarding a water budget overview from January 1, 2025-May 19, 2025.

Approved Projects Residential:

- * Total Approved - 6.90 AF
 - Three single-family residential approved administratively
 - One Multifamily approved by Council
- * Total Budget - 25 AF
- * Total Remaining - 18.10 AF

Approved Projects Non-Residential:

- * Total Approved - 12.52 AF
 - Three approved administratively
 - One approved by Council (Embry Riddle)
- * Total Budget - 25 AF
- * Total Remaining - 12.49 AF

Existing Contracts:

- * 4.36 AF Residential
- * 0.03 AF Non-Residential
- * 4.39 AF Total

Member Fruhwirth commented that she would like to see the WRMM numbers of actual versus contract so the Council can better allocate based on reality versus estimates.

This item was for discussion only, no formal action was taken.

- E. Presentation & Discussion Regarding July 2025 - December 2025 Residential & Non-Residential Water Budgets, in Accordance with the Amended 2022 Water Management Policy, Guideline No. 11.

Mr. Ruiz provided a presentation to the Subcommittee regarding the July-December water budgets. Staff needs recommendations from the Subcommittee on setting the Residential and Non-Residential Budgets for the Council at the last meeting in June. The Residential Budget has 18.10 AF remaining following the current period, and Non-Residential has 12.48 remaining. He reviewed a list

of upcoming projects that have gone through PAC which may fall into this budget period.

Potential Residential:

- * 34.3 AF approximate usage for all potential
- * Likely 25-75% will come through in the July-December timeframe

Member Fruhwirth commented that she was happy to see the infill projects on this list, but when comparing Stetson Apartments versus Villas Touchmark which seemed very low to her and asked staff to take a look at that to make sure everything is accurate.

Mr. Ruiz responded that Touchmark has a Water Service Agreement in place already, staff has asked them to reassess their water needs, and they will likely exceed their current agreement by 2-3 AF which is where the number on the presented spreadsheet comes from.

Potential Non-Residential:

- * 34.5 AF approximate based on all potential projects

Chair Goode asked how many units would be in Granite Creek Village.

Mr. Ruiz responded that he would review the numbers and get back to the Council.

Member Fruhwirth stated that she feels at least 25 AF would be appropriate based on the presented numbers.

Chair Goode stated that continuing the 25/25 for both in July-December would be appropriate.

MOTION BY MAYOR GOODE TO RECOMMEND 25 ACRE FEET FOR BOTH RESIDENTIAL AND NON-RESIDENTIAL WATER BUDGETS FOR JULY-DECEMBER 2025; SECONDED BY COUNCILWOMAN FRUHWIRTH: PASSED (2 - 0)

- F. Presentation & Discussion Regarding an Update on PFAS Consultant Contract. Utilities Manager Steven Olfers provided a presentation to the Subcommittee regarding the PFAS contract scope which would allow the city to make decisions based on engineering standards.

PFAS:

- * General name for fluoridated carbon chains that resist degradation in the environment
- * Over 10,000 identified
- * Found in many commercial products including cookware, food packages and textiles
- * Released into wastewater system from normal use
- * Treating at Wastewater plants present many challenges and high expense to effectively remove from the waste stream
- * Also found in water, air and soil samples throughout the environment

* Findings

- May 2022 city wells were tested and found to contain a small amount of PFAS in all wells
- Airport Well 5 found to have a level of contamination higher than recommended by the EPA and was subsequently temporarily taken off-line
- The Environmental Protection Agency issued new rules in 2023
- Maximum Contaminant Levels (MCL) were set at 4 parts per trillion (PPT) for PFOS and PFOA as well as other species that are regulated as a mixture

Response & EPA Rule Adjustments:

- * Monthly, quarterly testing
- * Current levels in Chino and Airport wells are well below the 4 PPT, except Airport Well #5 which isn't being run
- * Fall 2024, advertised RSOQ to procure a consultant to develop recommendations for treatment at Airport Well 5 and other wells
- * May 2025, EPA retracts several regulated PFAS substances, maintains MCL on PFOS and PFOA and extended date of compliance by May 2031
- * City is currently in compliance because Well #5 is not being run
- * Goal is to get Well #5 operational under the new standards

Consultant Contract Scope:

- * Purpose & Objectives - contract will focus on how PFAS gets into the aquifer and ways to determine additional well sites
- * Technical Reports Generated
 - Hydrogeologic Evaluation: study the existing aquifer, assist in siting new wells
 - Particle Tracking Model: look for potential PFAS sources, assists in siting new wells

Member Fruhwirth commented that it is good to be proactive and thinking about what is upstream, so this will be helpful for that model.

Alternative Treatment Methods:

- * Reducing PFAS levels with differing treatment methods
 - Blending
 - Wellhead treatment
 - Centralized treatment
- * Technologies to consider
 - Granular Activated Carbon
 - Ion Exchange
 - Fluoro-sorb
 - High-level treatment conceptual layouts

Treatment Strategy:

- * Overall alternative recommendations and decision matrix
 - Decision-making criteria including analysis to date
 - Final recommendations
 - Final conceptual site layout and costs
- * Roadmap
 - Combine all memoranda into one report

- Recommendations for phasing for immediate, intermediate and long-term solutions

Workshops & Deliverables:

- * Vendor workshops with staff - twenty-one total virtual and in-person meetings and workshops with two meetings for council
- * Timelines
 - First tech memo ten weeks after Notice to Proceed (NTP)
 - Other tech memos to follow every 2-4 weeks
 - Council meeting and public meetings
 - PFAS roadmap 60 weeks after NTP

Chair Goode commented that some of these considerations are slower moving and could lose effectiveness. He is hopeful that there will be new technologies coming into effect so they can be adopted if they are effective at addressing the city's issues.

This item was for discussion only, no formal action was taken.

- G. Presentation & Discussion Regarding Proposed State Water Legislation.
Mr. Ruiz provided a presentation to the Subcommittee with an update on water bills at the state legislature.

NAMWUA Review:

- * Tracked 122 water related bills
- * Supported 29 bills and opposed 39 bills, neutral on the remainder

Legislative Status:

- * Regular Session ended May 23
- * Pass budget by June 30
- * Governor has vetoed at least 11 water bills

Governor Signed Bills:

- * HB2691 Groundwater Replenishment District Annual Dues
- * HB2727 County Water Authority, Post 2024 Authority
- * HB2753 Groundwater Replenishment Pinal County

Transmitted to Governor:

- * HB2274, HB2570 and SB1116 - all vetoed

SB1520 - Rural Water:

- * Introduced as Water Protection, technical correction
- * Turned into a striker bill for rural groundwater
- * Passed Senate and placed on House caucus calendar

Parting Thoughts:

- * Rural Groundwater Regulation
- * Stormwater
- * Conservation

This item was for discussion only, no formal action was taken.

4. GENERAL ANNOUNCEMENTS FROM STAFF

None.

5. ADJOURNMENT

There being no further business to discuss, Chair Goode adjourned the meeting at 10:36 a.m.

PHILIP R. GOODE, Chair

ATTEST:

TOREY DAWSON, Deputy City Clerk



TO: MAYOR AND CITY COUNCIL
AGENDA: July 1 Water Issues Subcommittee Meeting
DATE: July 1, 2025
DEPT: Public Works
ITEM #: 3.B
SUBJECT: Presentation & Discussion Regarding the 2022 Water Management Policy - Current Residential & Non-Residential Water Budget Overview for January 1, 2025 through June 19, 2025.

ITEM SUMMARY

This item is for a review and discussion regarding the current residential and non-residential water budgets, including projects that have received approval for water between January 1, 2025 and June 19, 2025.

BACKGROUND

The Amended 2022 Water Policy, Policy 11-13, established a semi-annual water budget for residential and non-residential projects. The budget set for January 1, 2025 through June 30, 2025 for residential projects was 25 acre-ft/year and the budget set for non-residential projects was 25 acre-ft/year.

Between January 1, 2025 and June 19, 2025, six new residential projects were approved totaling 7.36 acre-feet per year. These projects include four single-family homes, a Senior Living home, and an eight-unit multifamily project. The total remaining residential budget is 17.64 acre-ft.

Between January 1, 2025 and June 19, 2025 eight new non-residential project were approved totaling 14.93 acre-feet per year. One project requested 11.33 acre-feet/year and was approved by WIS and City Council. The other projects were administratively approved. The total remaining non-residential budget is 10.07 acre-ft.

Between January 1, 2025 and June 19, 2025 a total of 23 projects were approved under existing contracts. Twenty-one of these projects were new single-family homes located primarily within Groundwater Subdivisions, one was in Chino Valley, and one was a non-residential project. The total number of residential dwelling units approved under existing contracts was 22. The total volume approved under existing contracts is 4.9 acre-feet per year. Projects under existing contract are not included in the water budget (Policy 9).

Attachment 1 includes the summary tables for the Residential and Non-residential budgets and the existing contract tracking table.

FINANCIAL IMPACT

There is no fiscal impact associated with this item.

RECOMMENDED ACTION

This item is for discussion only. No formal action will be taken.

ATTACHMENTS

1. June 19 Water Budget Update

**WATER POLICY TRACKING TABLE
APPROVED PROJECTS**

RESIDENTIAL PROJECTS							
	PERMIT TYPE	DESCRIPTION	PERMIT NUMBER	AFY	APPROVAL TYPE	WATER SERVICE AGREEMENT	DATE APPROVED
1	RESIDENTIAL	SFR-Hassayampa	ENG2502-020	0.17	ADMIN - Residential under 1 AFY	WSA25-006	3/12/2025
2	RESIDENTIAL	SFR-Rosser	B2411-108	0.17	ADMIN - Residential under 1 AFY	WSA25-010	3/3/2025
3	RESIDENTIAL	Bradshaw III Senior Living	PENDING	5.6	COUNCIL	WSA25-008	3/25/2025
4	RESIDENTIAL	Eightplex	B2503-019	0.96	ADMIN - Residential under 1 AFY	WSA25-017	3/24/2025
5	RESIDENTIAL	SFR Plus Casita- Jack Dr	ENG2505-022	0.29	ADMIN - Residential under 1 AFY	WSA25-034	6/3/2025
6	RESIDENTIAL	SFR-Terrace View	B2502-086	0.17	ADMIN- Residential under 1 AFY	WSA25-035	6/11/2025

TOTAL APPROVED	7.36
TOTAL BUDGET	25.00
TOTAL REMAINING	17.64

**WATER POLICY TRACKING TABLE
APPROVED PROJECTS**

NON-RESIDENTIAL PROJECTS						
	PROJECT TYPE	DESCRIPTION	PERMIT NUMBER	AFY	APPROVAL TYPE	DATE APPROVED
1	NON-RESIDENTIAL	ERAU Student Union	B2406-084	11.33	COUNCIL	1/28/2025
2	NON-RESIDENTIAL	Medical Spa	B2504-002	0.19	ADMIN-COMMERCIAL UNDER 1.5 AFY	5/7/2025
3	NON-RESIDENTIAL	New 14,664 SF BUILDING	B2503-044	0.63	ADMIN-COMMERCIAL UNDER 1.5 AFY	3/11/2025
4	NON-RESIDENTIAL	One Story Office Building Shell	B2502-189	0.37	ADMIN - Commercial Under 1 AFY	5/16/2025
5	NON-RESIDENTIAL	Stone Countertop Fabrication	B2412-110	0.62	ADMIN - Commercial Under 1 AFY	6/10/2025
6	NON-RESIDENTIAL	New Medical Office Building	PENDING	0.54	ADMIN - Commercial Under 1 AFY	6/11/2025
7	NON-RESIDENTIAL	New Medical Office Building	PENDING	0.29	ADMIN - Commercial Under 1 AFY	6/11/2025
8	NON-RESIDENTIAL	New Warehouse	B2412-185	0.97	ADMIN - Commercial Under 1 AFY	6/19/2025

TOTAL APPROVED	14.93
TOTAL BUDGET	25.00
TOTAL REMAINING	10.07

**WATER POLICY TRACKING TABLE
APPROVED PROJECTS**

	PERMIT TYPE	# OF RES UNITS	PERMIT NUMBER	AFY	APPROVAL TYPE	EXISTING ENTITLEMENT	DATE APPROVED	DEMAND METHOD	
1	RESIDENTIAL	SFR - HERITAGE UNIT 3 PHASE 1	1	B2412-1581	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	1/6/2025	WRMM MULTIPLIER
2	RESIDENTIAL	SFR - RANCH at PRESCOTT UNIT 7	1	B2412-193	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	1/6/2025	WRMM Multiplier
3	RESIDENTIAL	SFR - SUMMIT POINTE	1	B2412-003	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	1/13/2025	WRMM MULTIPLIER
4	RESIDENTIAL	SFR - STARDUST ESTATES	1	B2412-113	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	1/16/2025	WRMM MULTIPLIER
5	RESIDENTIAL	SFR-HILLTOP ESTATES	1	B2412-153	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	1/31/2025	WRMM MULTIPLIER
6	RESIDENTIAL	ESTANCIA DE PRESCOTT	1	B2412-194	0.17	N/A EXISTING CONTRACT/AGREEMENT	ESTANCIA DE PRESCOTT	2/10/2025	WRMM MULTIPLIER
7	NON-RESIDENTIAL	Self Storage	0	ENG2410-015	0.03	N/A EXISTING CONTRACT/AGREEMENT	WSA18-013	2/12/2025	EOR Demand
8	RESIDENTIAL	SFR-PRESCOTT ORIGINAL TOWNSHIP	1	B2406-035	0.17	N/A EXISTING CONTRACT/AGREEMENT	PRESCOTT ORIGINAL TOWNSHIP	2/26/2025	WRMM MULTIPLIER
9	RESIDENTIAL	SFR-COPPER CANYON VILLAGE	1	B2502-026	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	2/26/2025	WRMM MULTIPLIER
10	RESIDENTIAL	SFR - SUMMIT UNIT 3	1	B2412-098	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	2/27/2025	WRMM MULTIPLIER
11	RESIDENTIAL	SFR - SUMMIT POINTE BY CRYSTAL	1	B2502-183	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	2/27/2025	WRMM MULTIPLIER
12	RESIDENTIAL	SFR-ESTANCIA DE PRESCOTT	1	B2412-195	0.17	N/A EXISTING CONTRACT/AGREEMENT	ESTANCIA DE PRESCOTT	2/27/2025	WRMM MULTIPLIER
13	RESIDENTIAL	SFR-OAK TERRACE	1	B2412-030	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	3/3/2025	WRMM MULTIPLIER
14	RESIDENTIAL	SFR - SOUTHVIEW UNIT 1	1	B2411-090	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	3/19/2025	WRMM Multiplier
15	RESIDENTIAL	SFR - RESERVE AT WILLOW HILLS	1	B2503-067	0.17	N/A EXISTING CONTRACT/AGREEMENT	THE RESERVE AT WILLOW HILLS	3/25/2025	WRMM Multiplier
16	RESIDENTIAL	SFR - IDYLWILD	1	B2410-092	0.17	N/A EXISTING CONTRACT/AGREEMENT	WSA25-022	4/21/2025	WRMM Multiplier
17	RESIDENTIAL	SFR - HIDDEN VALLEY RANCH 10	1	B2504-097	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	4/28/2025	WRMM MULTIPLIER
18	RESIDENTIAL	SFR - HIDDEN VALLEY RANCH 10	1	B2505-011	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	5/7/2025	WRMM MULTIPLIER
19	RESIDENTIAL	SFR-CVID	1	ENG2502-018	1.30	N/A EXISTING CONTRACT/AGREEMENT	WSA25-011	3/20/2025	Unique Contract/Agreement
20	RESIDENTIAL	SFR - Delano	1	B2412-146	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	5/14/2025	WRMM Multiplier
21	RESIDENTIAL	SFR - Suburban Acres	1	ENG2505-002	0.17	ADMIN - Residential under 1 AFY	GROUNDWATER SUBDIVISION	5/29/2025	WRMM Multiplier
22	RESIDENTIAL	SFR - CROSSINGS AT WILLOW CREEK	1	B2505-022	0.17	ADMIN - Residential under 1 AFY	WSA00-032	6/3/2025	WRMM Multiplier
23	RESIDENTIAL	SFR - Foothills Amended	1	b2505-047	0.17	N/A EXISTING CONTRACT/AGREEMENT	GROUNDWATER SUBDIVISION	6/3/2025	WRMM Multiplier

	Number of Projects	Res Units	AF
Total Residential	22	22	4.87
Total Non-Residential	1	0	0.03
Totals	23	22	4.9

Existing Entitlement for water can be in the following forms:
 Groundwater Subdivision - Committed demand to platted areas as of 1998
 Contract - Recorded agreement with the City for an allocated amount of water for a project of project area.



TO: MAYOR AND CITY COUNCIL
AGENDA: July 1 Water Issues Subcommittee Meeting
DATE: July 1, 2025
DEPT: Community Development
ITEM #: 3.C
SUBJECT: Presentation & Discussion Regarding an Update on the Long-Term Water Management Plan.

ITEM SUMMARY

This item is for staff to provide an update on the development of the City's Long-Term Water Management Plan.

BACKGROUND

Plan development began with a grant application submitted to the United States Bureau of Reclamation in May 2024. The grant was awarded setting forth a working timeframe from November 2024 through December 2026. Subsequently, the City Council's Strategic Plan FY25-29 was adopted providing additional details.

Two previous public meetings have been held on the Plan, December 10, 2024 (Council Study Session), and April 1, 2025 (Council Subcommittee for Water Issues). Today's presentation will provide a brief update on the plan's outline and the status of the 2024 baseline data. A more comprehensive update is anticipated once all consultants are in contract.

FINANCIAL IMPACT

Overall project funding is budgeted and available in the Public Works Department FY25 and FY26 Water Budget, as well as available through the United States Bureau of Reclamation's Water Management Planning, Water Conservation Field Services Program (R24AS00252) grant.

RECOMMENDED ACTION

This item is for discussion only. No formal action will be taken.

ATTACHMENTS

1. Long Term Water Management Plan Presentation



Council Subcommittee for Water Issues

July 1, 2025

LESLIE GRASER, WATER RESOURCES
PROJECT MANAGER

Long-Term Water
Management Plan
Update



Agenda



- Outline Components - draft
- 2024 Baseline Data - draft



Outline Components

Body - Executive Summary, Introduction, Plan Development, Water Supplies, Water Demands, Water Future, Plan Implementation, References

Technical Memos

- Reservoir Operations
- Recharge and Recovery
- Big Chino importation
- Advanced Water Purification
- Stormwater
- Water Resource Management Model
- Demand Management
- Planning Horizons and Recommendations



2024 Baseline Data - Examples

(using the WRMM updated with 2024 data)

Prescott’s potable water service area overlies four governmental jurisdictions. How many accounts are associated with each jurisdiction? How much water was delivered to customers within each jurisdiction?

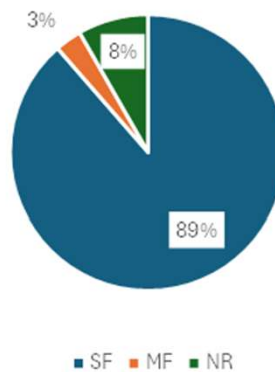
Potable System Active Accounts Accounts in 2024		
	# of Accounts	Volume Delivered (AF)
Prescott within City Limits	22332	5789
Unincorporated Yavapai County	2399	551
Chino Valley within Town Limits	763	171
YPIT Reservation Boundaries	79	105
Total	25573	6616



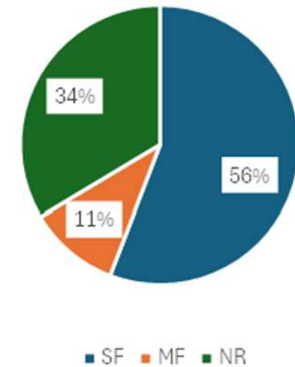
The Prescott potable water system categorizes its customer base as either Single Family, Multi-Family, or Non-residential. How much water was delivered to customers within these three primary categories in 2024?

Potable System Active Accounts Accounts in 2024		
	# of Accounts	Volume Delivered (AF)
Single Family	22658	3694
Multi-Family	799	698
Non-Residential	2116	2224
Total	25573	6616

Potable Service Area Accounts % of Total By Use Category



Potable Service Area Volume % of Total By Use Category





How many new accounts were added in 2024? How does the number of 2024 new accounts compare to the number of added accounts for the years 2015 to 2024?

New Accounts	
Prescott within City Limits	268
Unincorporated Yavapai County	17
Chino Valley within Town Limits	7
YPIT Reservation Boundaries	0
Total	292



10-yr avg.
356



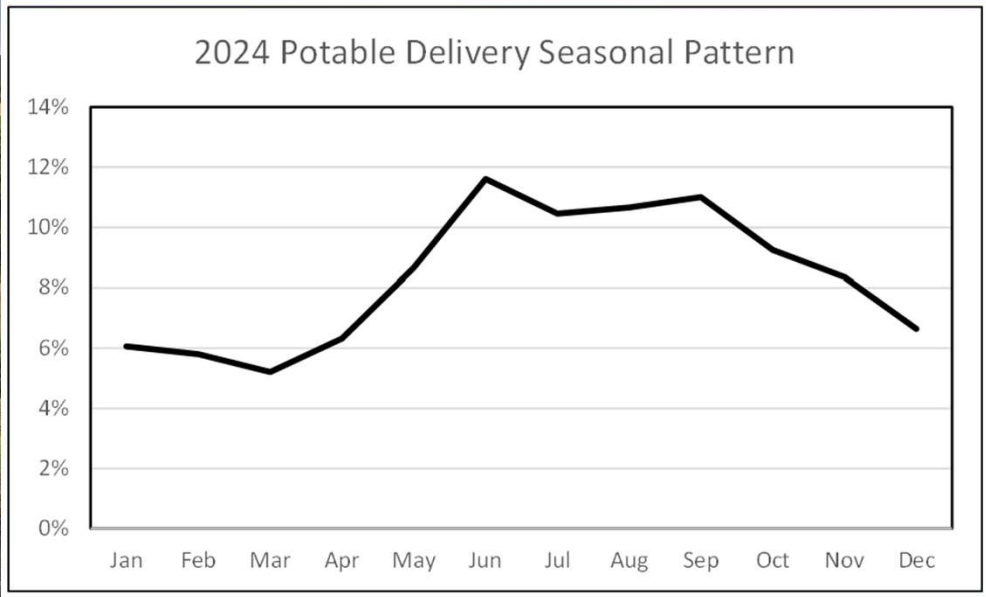
Of the 292 new accounts added in 2024 how many were Single Family Residential (SF), Multi-Family Residential (MF), and Non-Residential (NR)?

New Accounts		
	Account	Volume Delivered (AF)
Single Family	263	8.15
Multi-Family	3	0.86
Non-Residential	26	4.93
Total	292	13.95

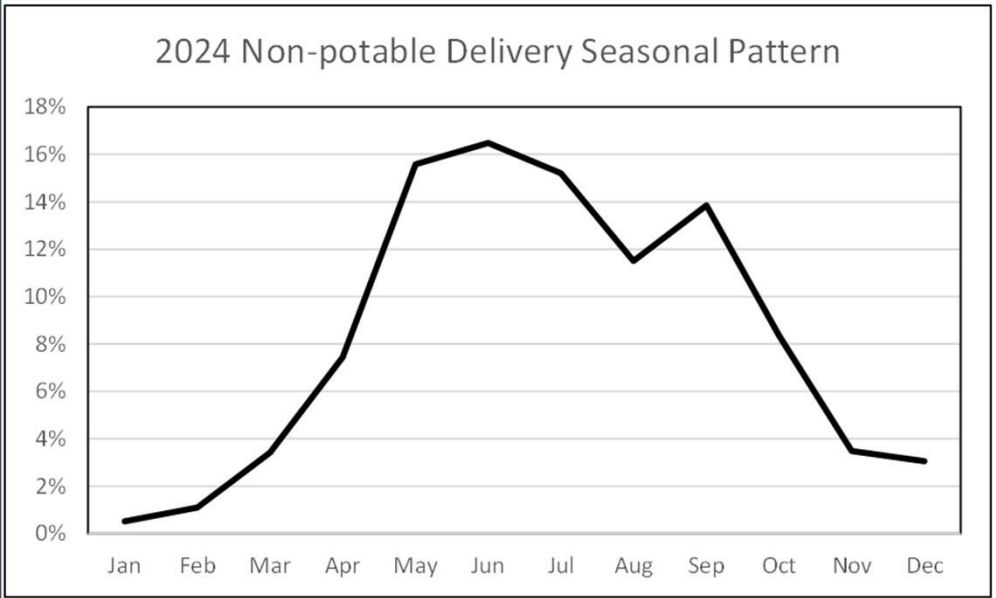
The apparent low volume of deliveries for new accounts reflects that many of the accounts are established prior to construction and occupancy of the new homes, units, or businesses.

2024 Baseline Data

(using Annual Water Withdrawal and Use Reports)



What was the seasonal peaking pattern for 2024?





Thank you,
Questions?



TO: MAYOR AND CITY COUNCIL
AGENDA: July 1 Water Issues Subcommittee Meeting
DATE: July 1, 2025
DEPT: Community Development
ITEM #: 3.D
SUBJECT: Presentation & Discussion Regarding an Update on City Lake Treatments & Willow Lake Management Plan.

ITEM SUMMARY

This item is for staff to provide an introduction to public works water quality monitoring, lake treatments at Watson and Upper Goldwater, and management planning at Willow Lake.

BACKGROUND

All four city reservoirs, Watson, Willow, and Upper and Lower Goldwater, are monitored by the Environmental Services team at Public Works every month for water quality and public health concerns. Since monitoring began in October 2024 multiple water quality impairments have been detected, two lake improvement projects are underway, and development of a management plan has initiated.

Watson Lake's water quality metrics do not meet EPA standards for surface water and the lake is listed as "impaired". Watson suffers from high pH and low dissolved oxygen as well as blooming aquatic weeds and harmful algae blooms. Public Works contracted with Aquatic Consulting and Testing to perform a whole lake water treatment on June 2nd to remove over 50% of the phosphorus from the water. Removing phosphorus creates a feedback cycle that raises oxygen levels and neutralizes pH while reducing algae and aquatic weeds. In October 2025 a second larger treatment will be performed to reduce phosphorus in the lake bottom sediment, the primary source of phosphorus in the lake.

Upper Goldwater Lake increasingly suffers from the same impairments as Watson, high pH and low dissolved oxygen alongside harmful algae blooms in summer. To improve the water quality and clarity and protect public health Public Works has performed two of four planned summer treatments. Lake treatments are designed to reduce accumulated organic material and nutrients in the lake that are the primary cause of water quality issues. Project scoping to install an aerator in the lake is also underway with APS and ADWR.

At Willow Lake, management planning is underway to guide the city through development of a management plan that unifies city staff to best manage the lake and surrounding open space. The Willow Lake management plan will provide the City guidance on managing water levels, water quality, recreation and other services, native and non-native vegetation, threatened and endangered species, as well as various aspects of fire and public safety and open space improvement.

FINANCIAL IMPACT

Overall project funding is budgeted and available in the Public Works Department 2025 & 2026 Water Budget.

RECOMMENDED ACTION

This item is for discussion only. No formal action will be taken.

ATTACHMENTS

1. City Lakes & Willow Lake Management Update Presentation

Water Issues Subcommittee

July 1, 2025

Jeremy Cordova
Environmental Project Manager

Update on City
Lakes Treatment
and Willow Lake
Management



Agenda



- Introduction
- Lake Pollution
- Lake Treatment
- Management Plan
- Treatment Results
- Next Steps
- Questions & Discussion

INTRODUCTION



(Above) Image of Watson Lake, Prescott AZ

City of Prescott owns 4 reservoirs

Watson, Willow, and Upper and Lower Goldwater
Watson and Willow are the city's source of recharge water

Water quality concerns:

Low dissolved oxygen
High pH
Excess nutrients

Water quality monitoring, lake treatments, and management planning have initiated to improve city lakes

CAUSES OF LAKE POLLUTION

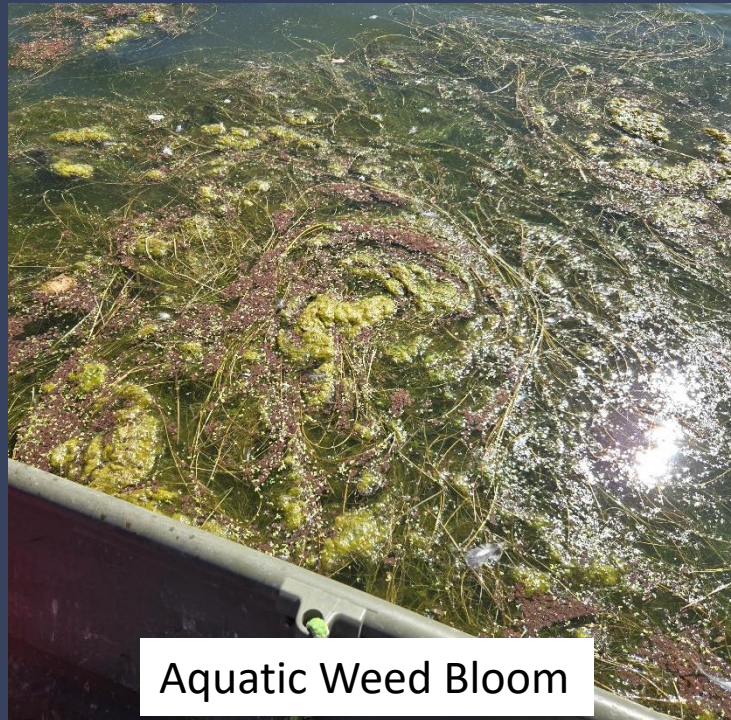


(Above) Image of common stormwater pollutants, courtesy of University of Kentucky

Water quality issues are caused by:

- Sediment inflows to lakes
- Polluted stormwater
- Lack of flushing
- Legacy pollution

RESULTS OF LAKE POLLUTION



Aquatic Weed Bloom



Harmful Algae Bloom



Anoxic Sediment (Black)



Lake pollution results in:

Aquatic weed blooms

Harmful algae blooms

Anoxic dead zones

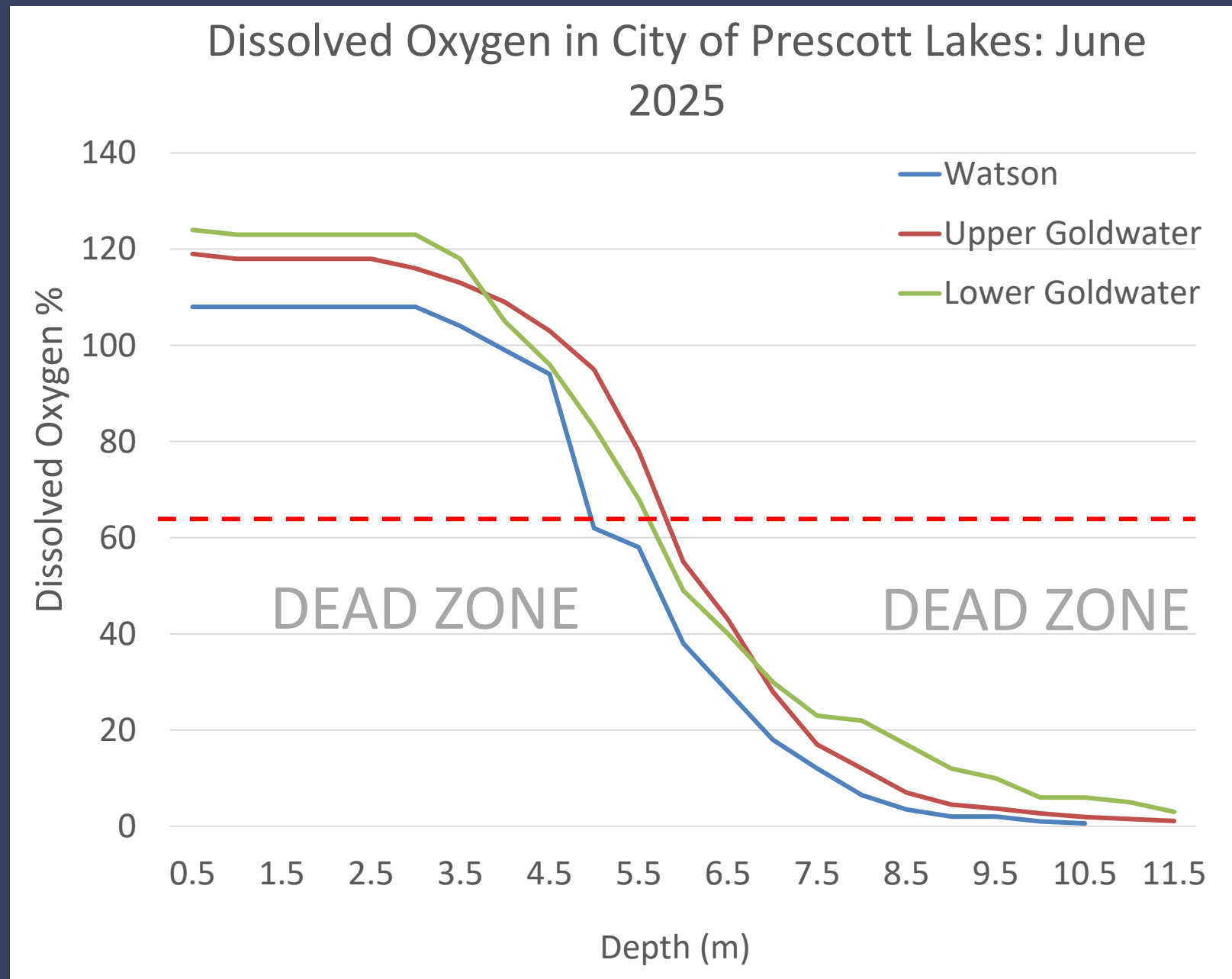
Public health/safety risk

EPA impairments

Reduced fishing and recreation opportunities

(Above) Images of common results of lake pollution in the city of Prescott.

LAKE DATA



(Above) Graph of dissolved oxygen with depth in city lakes. Note the red line at 65% for EPA impairment, and the presence of dead zones below 5 meters of depth.

Dissolved Oxygen (DO) is a primary metric of lake health

DO drops off rapidly below 4 meters depth

3 lakes qualify for DO impairment

The deeper halves of city lakes are dead zones

Anoxia allows release of metals and phosphorus from sediment

Lack of bottom feeders and healthy decay of organics

SOLUTIONS



(Above) Phosphorus binding treatment of Watson Lake. Note the white trail behind the boat in the center and right side of the image

Watson Lake: Phosphorus binding:

Reduces nutrients to reduce blooming algae and weeds

Improve water quality and fish habitat

Begins elimination of impairments for pH and O₂

Upper Goldwater Lake: Muck and phosphorus reduction, Aerator

Improve water quality and clarity, balance pH

Increase oxygen, allow for more and bigger fish, prevent impairment status

Willow Lake: Management planning

Address low water levels, poor water quality, sediment inflows, invasive vegetation, fuel reduction and public safety

SOLUTIONS



General Solutions for all City Lakes

Water Quality Monitoring: Every Lake Every Month

Aquatic Weed Harvesting Boat

Natural Water and Sediment Filters at Inlets

Stocking with Grass Carp AKA White Amur (Watson and Willow)

(Left) Electric aquatic weed harvesting boat to remove aquatic weeds from city lakes. (Right) Stormwater Specialist Jon Hilton constructs a rock dam to reduce sediment inflows into Upper Goldwater Lake

TREATMENT RESULTS



Early Treatment Results:

Upper Goldwater:

Muckaway and PondClear: 45% reduction in phosphorus and 25% improvement in water clarity from May to June. AZGFD requests higher fish stocking rates

Watson:

Eutrosorb: Removed 220 lbs of phosphorus from the water column, larger sediment treatment scheduled for Oct 2025.

(Above) Treatment products recently used on Watson and Upper Goldwater Lakes

MANAGEMENT PLAN: WILLOW LAKE



(Above) Image of Willow Lake, Prescott AZ

The City has contracted Southwest Decision Resources to develop a management plan

Management plan goals:

- Water quality/quantity improvement
- Interdepartmental coordination
- Threatened and endangered species management
- Public safety and recreation improvement
- Open space management and preservation

NEXT STEPS



(Above) Image of Watson Lake, Prescott AZ

Watson:

- Lake sediment phosphorus treatment in Oct
- Continue use of aquatic weed harvester
- Design and build fish barrier to stock lake with grass carp

Upper Goldwater:

- Muckaway and phosphorus treatment monthly during summer
- Continue project development for aerator on dam
- Build natural sediment and water filters around lake inlets

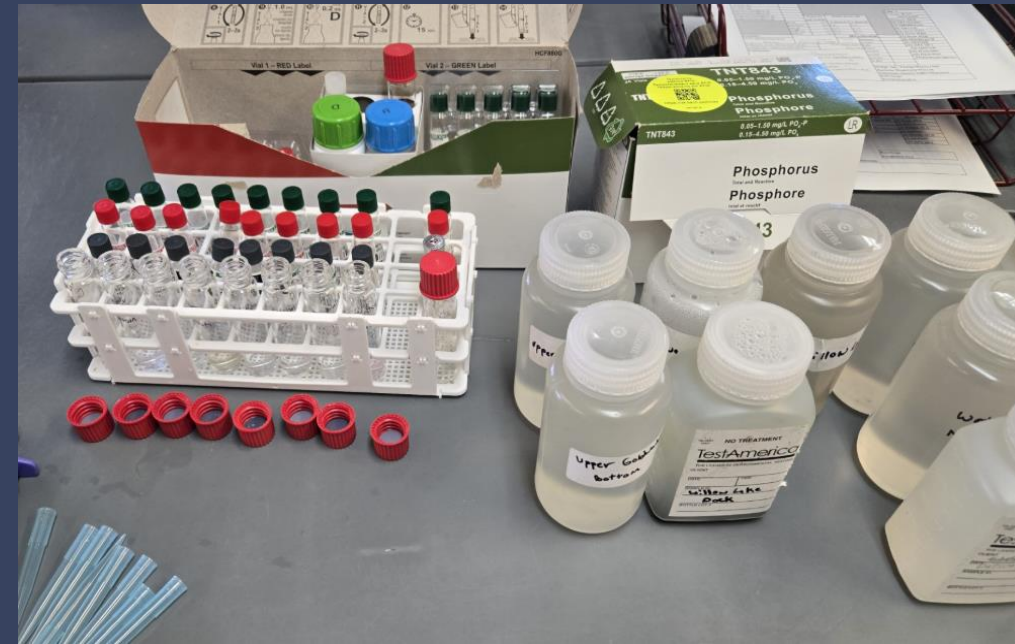
Willow:

- Management plan in development with significant updates anticipated
- Q4 of 2025 Lake to be stocked with grass carp



Environmental Services Team

Matt Killeen, Env Program Manager
Jeremy Cordova, Env Project Manager
Jon Hilton, Stormwater Specialist



Questions?





TO: MAYOR AND CITY COUNCIL
AGENDA: July 1 Water Issues Subcommittee Meeting
DATE: July 1, 2025
DEPT: Public Works
ITEM #: 3.E
SUBJECT: Presentation & Discussion Regarding Green Stormwater Infrastructure.

ITEM SUMMARY

This item is for staff to discuss how Green Stormwater Infrastructure (GSI) is being utilized to address a number of challenges facing urban communities. Pollution reduction, water conservation, heat island reduction, and traffic calming are all benefits to these features. Staff will share how the City is incorporating these natural, cost-effective, solutions into our future.

BACKGROUND

As the Environmental Protection Agency (EPA) has identified, stormwater is one of the biggest threats to surface water quality in the United States. It can transport trash, bacteria, heavy metals, and other pollutants through storm sewers and into local waterways. Heavy rainstorms can cause flooding that damages property and infrastructure. The EPA, states, and municipalities have made noteworthy progress protecting our nation's waters through the implementation of the Clean Water Act (CWA). GSI may be used to comply with CWA requirements, which are applied locally and enforced through numerous Arizona Department of Environmental Quality (ADEQ) programs such as the MS4 program, MSGPs, Construction General Permits, etc. GSI is a valuable tool to treat stormwater, improve water quality, and mitigate flooding while also beautifying our communities.

Staff are taking a measured approach to integrate these features into Prescott's future. Staff will review the approaches toward GSI integration on both the public and private sides. The City also successfully completed an ADEQ 604B Water Quality Improvement Grant to evaluate potential sites in our community. That process has helped refine our approach to integrating GSI in municipal facilities and parks.

FINANCIAL IMPACT

There is no fiscal impact associated with this item at this time.

RECOMMENDED ACTION

This item is for discussion only. No formal action will be taken.

ATTACHMENTS

1. Green Stormwater Infrastructure Presentation



Water Issues Subcommittee

July 1, 2025

Matt Killeen
Environmental Program Manager

Green Stormwater Infrastructure (GSI)

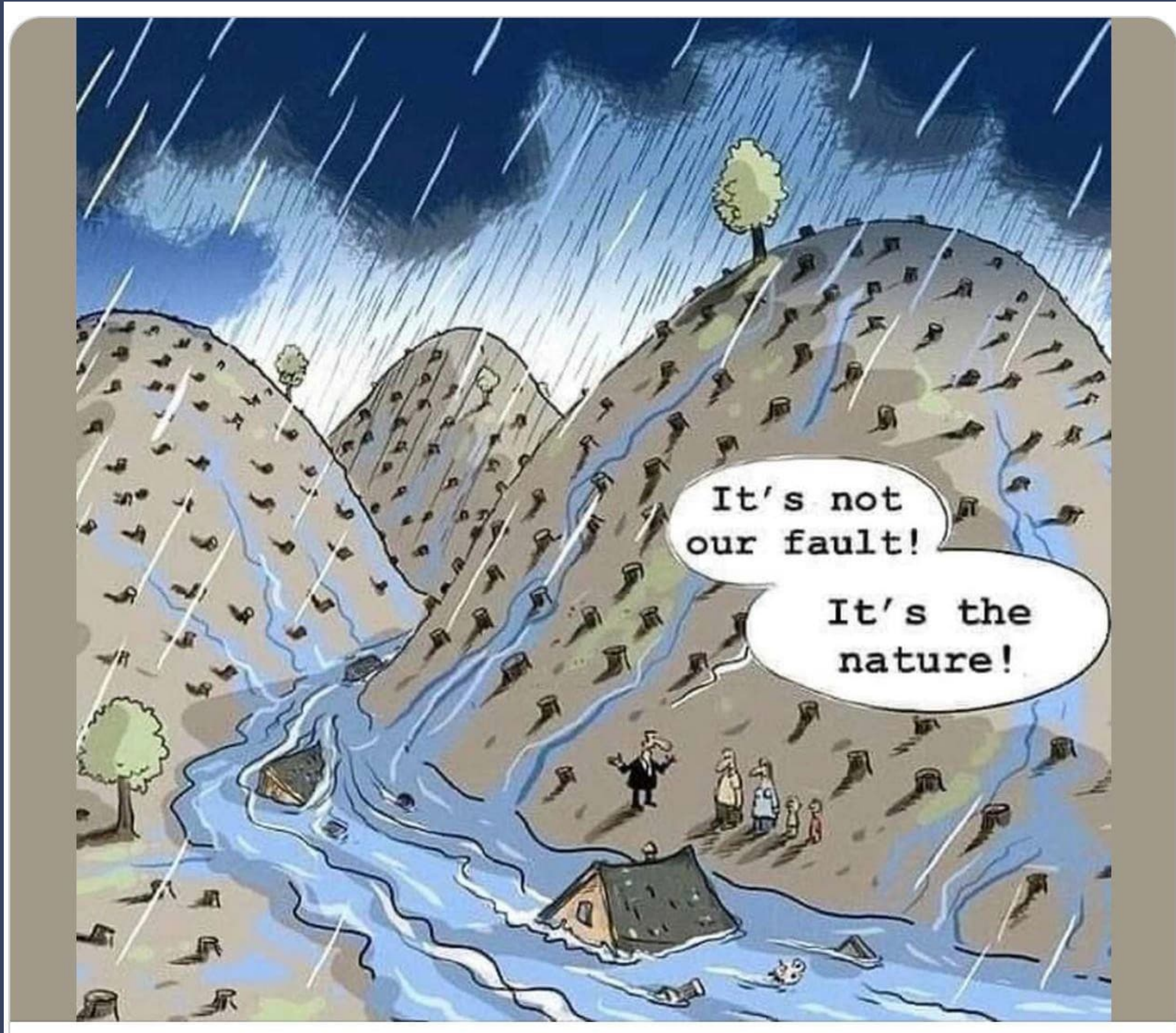
Natural solutions for urban challenges.



Agenda



- What is GSI?
- City standards & Opportunities
- Water Quality Improvement Grant
- What's Next?
- Questions & Discussion



What is Green Stormwater Infrastructure (GSI)?

GSI is designed to mimic nature and capture rainwater where it falls.

Slow it, spread it, and sink it!

GREEN STORMWATER INFRASTRUCTURE

Green Stormwater Infrastructure, or GSI is a design technique that uses plants, soils, permeable concrete, or other permeable surfaces to allow stormwater to soak into the ground.

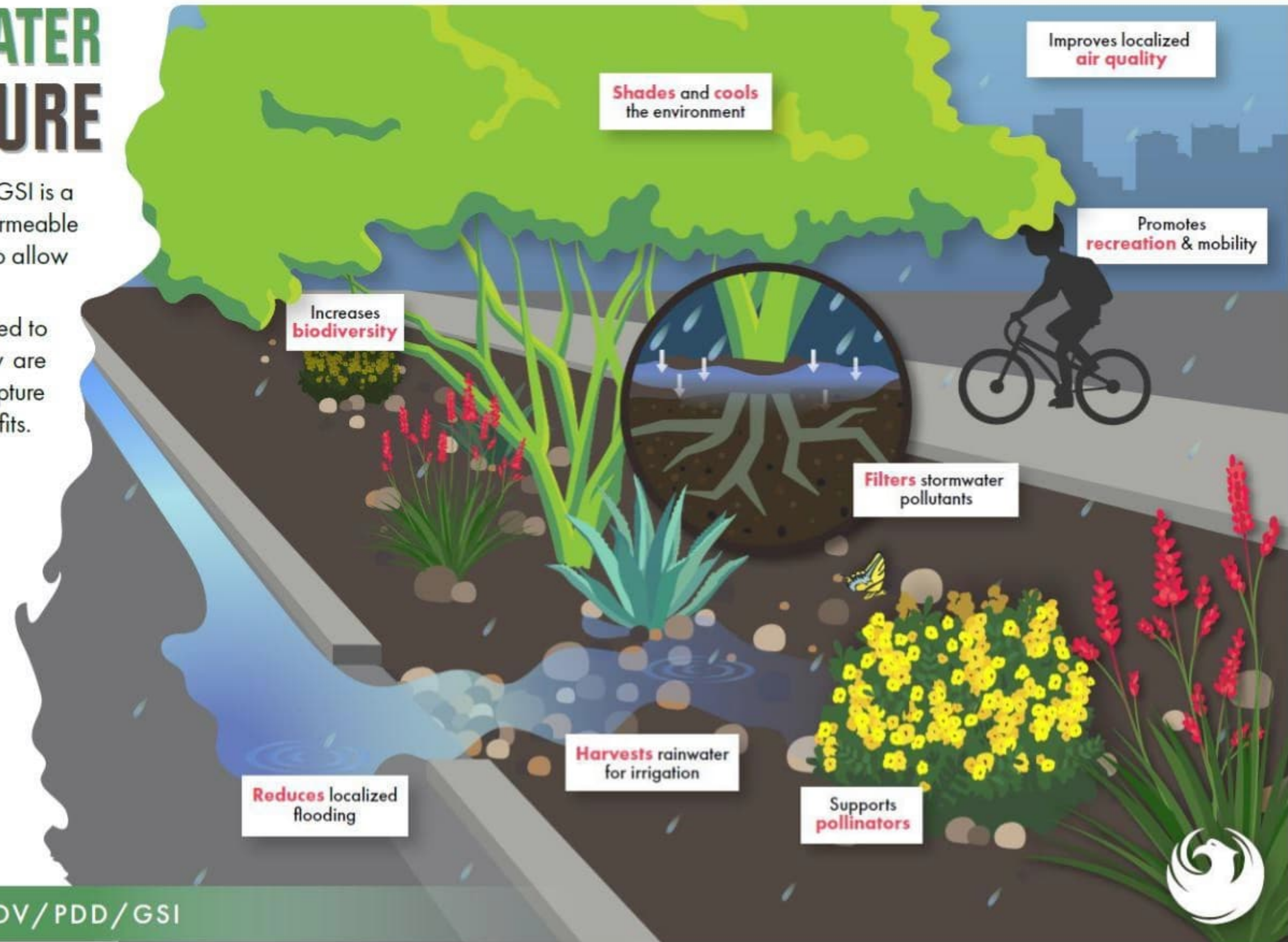
These features are also sometimes referred to as low impact development (LID). They are generally small in size and are used to capture water where it falls for multiple co-benefits. Examples include:

Examples include:

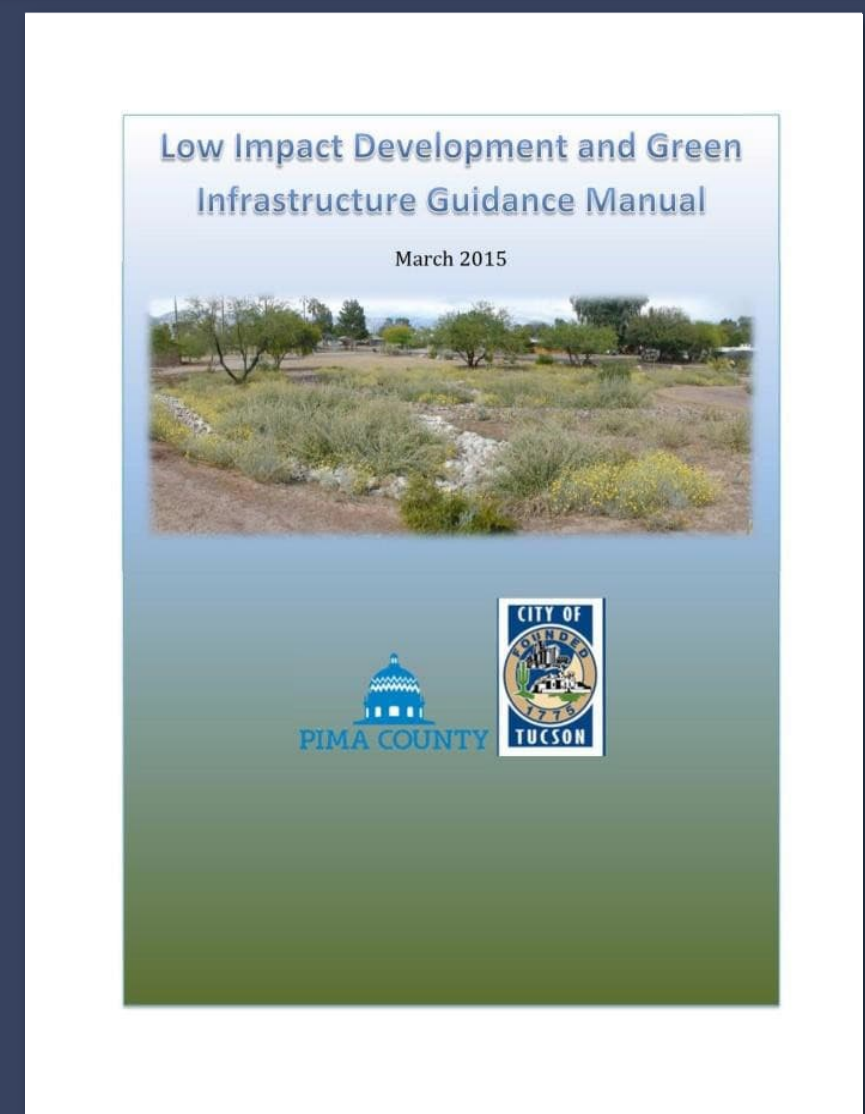
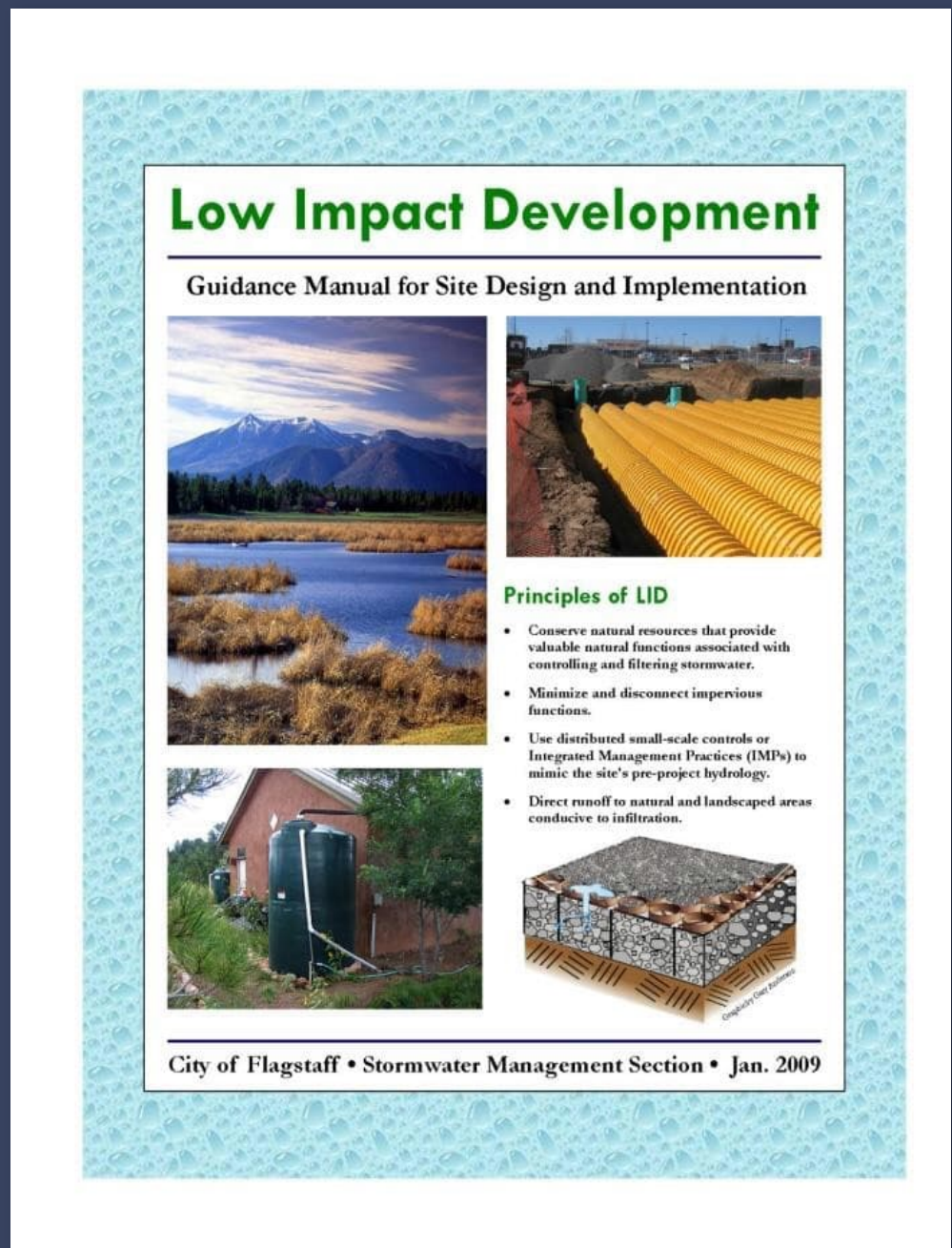
- Permeable pavement
- Curb openings
- Bioswales
- Stormwater harvesting basins
- Bioretention systems
- Curb extensions (chicanes)

LEARN MORE AT:

PHOENIX.GOV/PHOENIX.GOV/PDD/GSI



External Resources



Existing Prescott Standards

Prescott City Code 16-6

All stormwater runoff generated from new development shall not discharge untreated stormwater (aka First Flush Treatment = 0.5" x Impervious area)

General Engineering Standards 3.10

For developments with surface flows, stormwater may be collected and treated in engineered vegetated basins on site...

2025 Draft General Plan (pg.22 from June 12 agenda packet)

WATER QUALITY GOALS

Goal 1: Protect surface waters and groundwater recharge areas to maintain the high quality of Prescott's water.

Goal 2: Enhance stormwater use and management for aquifer recharge and optimization of water treatment infrastructure.



What is Green
Stormwater
Infrastructure
(GSI)?

RECHARGE
Over Runoff
& Evaporation

Arizona Water Quality Management Planning

604(b) Grant* | Fiscal Year 2024

Updated January 2025

Green Stormwater Infrastructure Prioritization and Design in Prescott (\$98,338)

Recipient: City of Prescott



The City of Prescott has had challenges creating successful Geographic Information Systems (GIS) projects within the Upper Granite Creek Watershed with a geographical focus on the downtown area. This project will have two major Scope of Work tasks to address these challenges:

Task 1: Identify, prioritize, and develop concept plans for five sites that meet multiple objectives including water quality improvements in underserved areas within Prescott.

Task 2: Create an outreach and participation program for stakeholders (ArcGIS StoryMap).

Working with consultants and stakeholders for **Task 1**, the City will explore potential sites and conduct a weight-ranked GIS prioritization process. Projects will be ranked by categories such as: water quality benefit, ease of implementation and maintenance, cost, site complexity, outreach potential, as well as other relevant categories identified by the stakeholder group.

From the resulting ranking, the City, consultants, and stakeholders will identify five sites for developing conceptual designs and cost estimates. These sites will be prioritized and integrated into the City's stormwater budget for future construction.



As part of the site evaluation process, the City, consultants, and stakeholders will evaluate opportunities and obstacles and use the information to build an ArcGIS StoryMap for **Task 2**. To be most effective, development of the StoryMap should be inclusive and interactive. Targeted outreach and collaboration with the stakeholder group will occur early in the process.

The deliverables of Task 2 are:

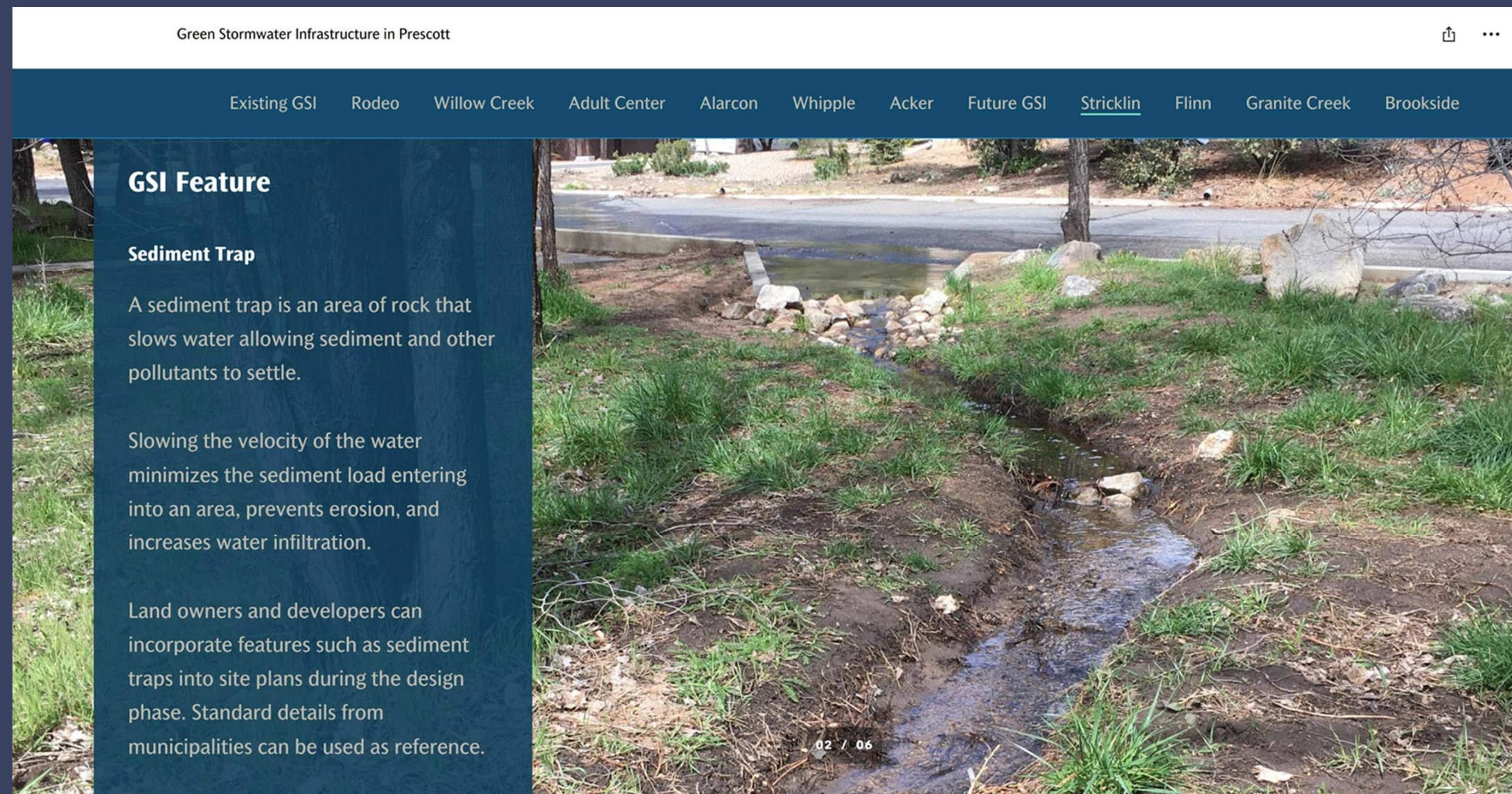
- Outreach presentation to stakeholders
- Online StoryMap supporting GIS best practices and challenges

[View the online Storymap >](#)

Are you part of the Prescott Community? [Take the city's survey to help prioritize projects >](#)

* The federal Clean Water Act section 604(b) allows the U.S. Environmental Protection Agency (EPA) to work with state agencies to grant funds for water quality management planning projects. This grant money is awarded each year to applicants across the state for water quality management planning in their respective regions.

Arizona Department of Environmental Quality 604B Water Quality Improvement Grant



<https://storymaps.arcgis.com/stories/5ccacbc1dfe43d0b2f03b49cea32dd6>

[← https://azdeq.gov/wqd-604b-grants](https://azdeq.gov/wqd-604b-grants)

Ranking

PROJECT PRIORITIZATION TEMPLATE

Enter scores in the chart below. Use whole numbers zero through five (0-5) to calculate the Project Prioritization Score. The higher the value, the better. A 5 for financial means low capital and maintenance costs, while a 1 or 0 means very high costs.

Based on data from the American Forests Tree Equity Score national explorer

CRITERIA WEIGHT Total weight values should equal 100.

PROJECTS	OWNER	DETAILS	CRITERIA WEIGHT								TOTAL WEIGHT (100)	TOTAL SCORE	tree equity score	CRITERIA SCORE	SCORE VALUE
			20	10	5	10	20	10	10	15	100				
			Environment	Priority Index from Tree Equity	Financial	Technical	Water Quality	Partnerships & Cost Reduction	Tree Canopy Gap	Flooding					
Granite Creek Park - Market Depot curb cuts and in slope basins	Private		5	5	4	4	5	4	3	3	85	65	0	0%	
Brookside Blvd	City	median retrofit to rain garden	5	4	4	3	5	4	1	4	80	91	1	20%	
Granite Creek Park entrance basin	COP		4	5	4	4	4	3	3	4	78	65	2	40%	
Memorial Island	COP		3	5	3	3	5	4	3	4	77	61	3	60%	
Montezuma ROW rain gardens	COP		5	3	3	3	5	3	1	4	75	88	4	80%	
Stricklin Park	COP		5	3	4	5	2	5	2	4	74	83	5	100%	
Flinn Park	COP	curb cuts and level spreader	5	3	4	5	2	4	2	4	72	84			
PHS Ruth St to athletic fields	PUSD	divert street runoff to swales/basins	3	4	2	2	5	3	2	4	68	75			
Ken Lindley field, north side along Willis	COP		3	5	3	3	3	3	3	4	67	61			
Grove ROWs, east side	COP		2	5	3	1	5	2	3	4	65	61			
Adult Center GSI	COP	revitalize, deal with problem areas	3	4	5	5	2	5	4	1	64	58			
Fire Station on 6th st.	Private	basin with zuni bowl outlet to park	2	5	4	1	4	4	3	3	63	65			
PHS bus drop off	PUSD	basin in corner by bus lane off Ruth St	2	4	3	2	5	3	2	2	59	75			
South Alarcon ROW rain garden	COP		2	3	4	4	2	3	2	4	60	86			
Prescott City Hall	COP	parking lot island curb cuts	0	5	4	5	5	1	3	2	58	61			
Alarcon Rain Garden retrofit	COP	curb cuts, reexcavation, replanting	1	5	4	4	2	2	3	4	56	86			

Design & Build

Green Stormwater Infrastructure Program

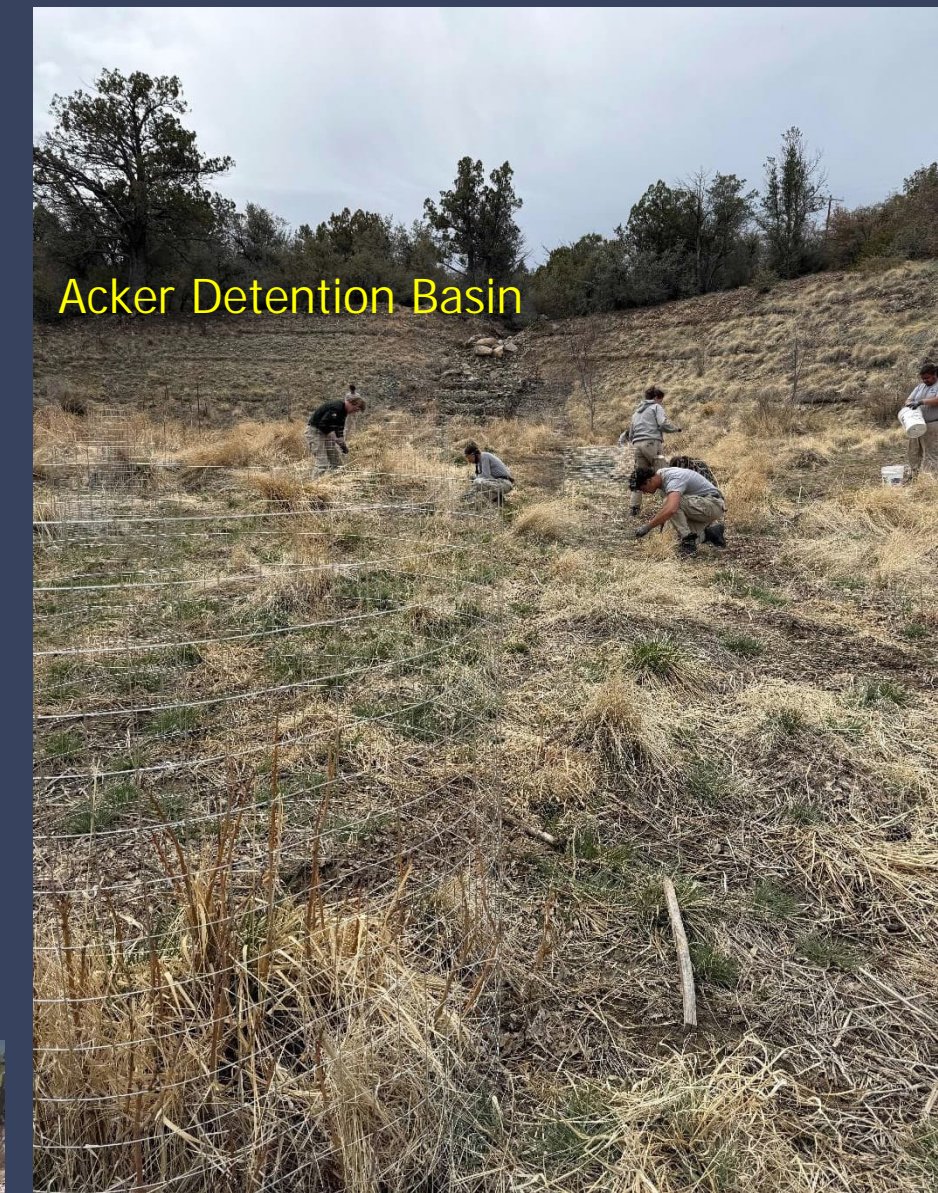
	BUDGET FY25	EST END FY25	CARRYOVER	FY26 NEW	FY26 BUDGET	FY27 PROJECTION	FY28 PROJECTION	FY29 PROJECTION	FY30 PROJECTION
Design/Arch/Eng	-	-	-	180,000	180,000	140,000	165,000	170,000	-
Other Professional Svc									
Internal Engineering									
Construction	-	-	-	290,000	290,000	330,000	305,000	300,000	-
Total	-	-	-	470,000	470,000	470,000	470,000	470,000	-

Maintenance required

FY25 maintenance for many sites was accomplished using the Americorps NCCC group, GEM Environmental Corps and other volunteer groups



Activity Center



Acker Detention Basin



Willow Creek Dog Park



Rodeo Bio Basin

In FY26, a GSI-specific landscape contract will need to be established through the Stormwater/NPDES budget.



Environmental Services Team
Matt Killeen, Env Program Manager
Jeremy Cordova, Env Project Manager
Jon Hilton, Stormwater Specialist

Questions?