

FAQ – Green Stormwater Infrastructure Plan

1. What is Green Stormwater Infrastructure?

Green Stormwater Infrastructure (GSI) is an alternative approach to managing stormwater, which is rainwater that can flow over paved surfaces and pick up pollutants such as motor oil or pesticides and deposit them into creeks and the Bay without any treatment. While conventional stormwater infrastructure uses pipes and storm drains to collect stormwater and convey it to local creeks untreated, GSI uses plants, soils and other natural landscape features to capture stormwater, let it soak into the ground, and be filtered/treated by soil and plants. This reduces the quantity of water and pollutants flowing into local creeks.

For more information on the different types of GSI features, visit [My Watershed Watch](#).

2. Why is the City Implementing GSI Projects in San José?

Stormwater runoff is regulated by a [Stormwater Permit](#), issued by the State, which requires the City to implement best management practices that will protect waterways by preventing non-stormwater and polluted stormwater discharges to the storm sewer system. The Permit requires development of a GSI Plan, describing how the City will develop infrastructure to slow, infiltrate, treat and use stormwater before discharging to waterways. This will improve water quality compared to the current system, where the stormwater runoff is released without treatment directly into local streams, creeks and the Bay.

In addition to the Stormwater Permit, the City must comply with a Consent Decree with San Francisco Baykeeper that requires the City to develop a plan (Comprehensive Load Reduction Plan) for the purposes of improving stormwater quality and reducing stormwater flows to its major waterways and tributaries. The City's GSI Draft Plan has been developed in a manner that fulfills the City's obligation under the Consent Decree.

3. What are the Benefits of GSI Projects for my Community?

GSI captures stormwater and reduces the amount of pollutants flowing into local water bodies. Additional potential benefits are listed on the City [website](#) and include:

- Improved Water Quality
- Reduced Flooding
- Increased Water Supply
- Improved Air Quality
- Improved Wildlife Habitat
- Safer Pedestrian and Bicycle Facilities
- Climate Resiliency
- Neighborhood Beautification

- Recreational Enhancements
- Reduced Heat Island Effect

4. Why is this project important?

Beyond the community and environmental benefits mentioned above, GSI strategies fulfill numerous City requirements and support important initiatives, as listed below:

- Action IN-3 17 in the [Envision 2040 General Plan](#)
- Municipal Regional [Stormwater Permit](#) - National Pollutant Discharge Elimination System (NPDES) Permit requirements
- 2016 Consent Decree with Baykeeper
- Key City goals of enhanced climate resiliency, improved local water supplies, and energy savings (through flood protection, potable water conservation, increased groundwater recharge, reduced urban heat islands, and public space beautification)
- Climate Smart San José, a communitywide initiative to reduce air pollution, save water and improve quality of life

5. How will locations be selected for GSI projects?

Prioritization of potential projects in the GSI Plan was achieved through a rigorous evaluation process. The evaluation considered multiple criteria for providing water quality benefits required by the [Stormwater Permit](#) and Consent Decree, as well as community benefits such as enhanced water supply, flood control and recreation enhancements. The prioritization process is outlined in the Project Selection Criteria below.

Project Selection Criteria

1. Performance
 - a. Water Quality Performance - Pollutant Removal Effectiveness
 - b. Flood Reduction Benefits - Peak Flow Reduction in Flood Priority Areas
 - c. Groundwater Recharge - Infiltration Feasibility
 - d. Parcel size and land use
2. Constructability
 - a. Stakeholder Outreach and Feedback – City Interdepartmental Coordination
 - b. Hydrogeological Constraints
 - c. Site Space Constraints
 - d. Constructability Measurements
 - i. Depth to Groundwater
 - ii. Slope
 - iii. Soil Type
 - iv. Contamination Areas
3. Co-Benefits
 - a. Synergies with Planned City Projects

- b. Community Benefits
- c. Placemaking
- d. Enhanced Habitat
- e. Co-benefit Measurements
 - i. Recreational areas that would not be impacted by green stormwater infrastructure
 - ii. Recreational facilities that would be improved with underground stormwater storage below existing fields
 - iii. Recreational areas that are not subject to reservations by the public
 - iv. Sites where green stormwater structure elements could be integrated into existing vegetation areas or low spots
 - v. Sites with low Park Condition Assessment scores that could benefit from rehabilitated fields
 - vi. Sites distributed throughout the City
 - vii. Sites that have current or upcoming capital projects

6. What will be the process for community input in these projects?

As the City determines which projects are feasible, the public outreach/input process guidelines (described below) will be implemented during the project design phase.

The City will conduct public outreach during planning and design phases, as appropriate, to:

- Receive public and neighborhood input and address comments related to park usage and aesthetics as well as any safety concerns.
- Update community on project progress.

7. How will Green Stormwater Infrastructure projects in parks be designed to avoid loss of play areas or impact to current park usage?

If park sites are contemplated for regional GSI, the City will utilize the Project Design Considerations below to design and implement selected projects so that proposed features maximize benefits to the community and the environment and minimize the loss of park use during phased construction. The public outreach/input process guidelines provide an outline for outreach to notify the community about project details and the opportunity to provide input (see Q6).

Project Design Considerations

1. Preserve, and where opportunities exist, enhance park recreation uses
 - a. Existing recreational uses will be preserved, and not negatively impacted
 - i. Retain full recreational function except during storm
 - ii. No negative impacts to existing, mature trees
 - b. Where appropriate, provide additional recreational and educational opportunities

- i. Provide aesthetically enhanced landscape
 - ii. Enhance trail network
 - iii. Provide recreational amenities
- 2. Aesthetic Considerations
 - a. Project will not create negative visual impacts, and park aesthetics will be enhanced where appropriate
 - b. Landscape architecture and public art considerations will be part of the project development
- 3. Safety Consideration
 - a. City will ensure the safety of the public and park usage during construction
 - i. Contractor to implement site safety requirements
 - ii. Contractor to comply with working hours and traffic control requirements
 - iii. Contractor to minimize construction impacts such as noise and dust
 - b. Maintain the safe usage of park
 - i. Project will not create safety concerns
 - ii. City will properly and frequently maintain the park area to ensure the site is always safe for public usage.
 - iii. Safe access to and throughout the park will be maintained, and enhanced where appropriate

8. How much will these projects cost and how will they be funded, including ongoing maintenance?

The potential regional projects described in the GSI Plan, treating approximately 2,400 acres of land, represent an estimated combined cost of \$126 million, including design, construction, operations and maintenance. Based on similar precedent projects, preliminary annual operations and maintenance costs are estimated at 1 percent of the total design plus construction costs. In addition, the plan considers significant increases in the implementation of smaller green streets projects.

In November 2018, voters approved Measure T, authorizing up to \$650 million in general obligation bonds. The Council approved a \$25 million allocation for clean water projects, including green infrastructure projects. The City is exploring other funding mechanisms, including grants. The City will continue to evaluate to better determine the feasibility and fiscal impacts of all alternatives.

9. How will site safety be prioritized, including construction, public access and ongoing cleanliness and health?

Site safety during construction and design will follow the City's Safety Guidelines outlined in the Project Design Criteria (see Q6), to maintain public safety throughout construction and implementation phases as well as ongoing maintenance.

Green Stormwater Infrastructure sites have been implemented and maintained in communities throughout the United States and the world for more than a decade. Most park projects listed below are highlighted, with photos, in the [EPA Green Infrastructure in Parks Report](#).

Aboveground regional projects that include features such as sports fields and play areas in detention basins, as well as wetlands, bioretention areas and stormwater retention ponds surrounded by trails, landscaping and recreation uses:

- Cromwell Park in Shoreline, Washington
- Hunter Point South Waterfront Park in Queens, New York
- Historic Fourth Ward Park in Atlanta, Georgia
- Elmwood Park in Omaha, Nebraska

Underground regional projects that include large underground infiltration systems that allowed for aboveground uses such as soccer and baseball fields to be restored:

- Sun Valley Park in Los Angeles County, California
- Alta Vista Park in the City of Redondo Beach, California