



Sustainability Management Plan



Sustainable Management Plan

SUSTAINABILITY PLANNING CONTEXT



Sustainable Management Plan Overview



- TPA received an FAA grant to prepare a Sustainable Management Plan in 2013
- TPA was completing an Airport Master Plan Update as the sustainability project began
- Good opportunity to strategically plan for and integrate sustainability into the future development and operation of the Airport



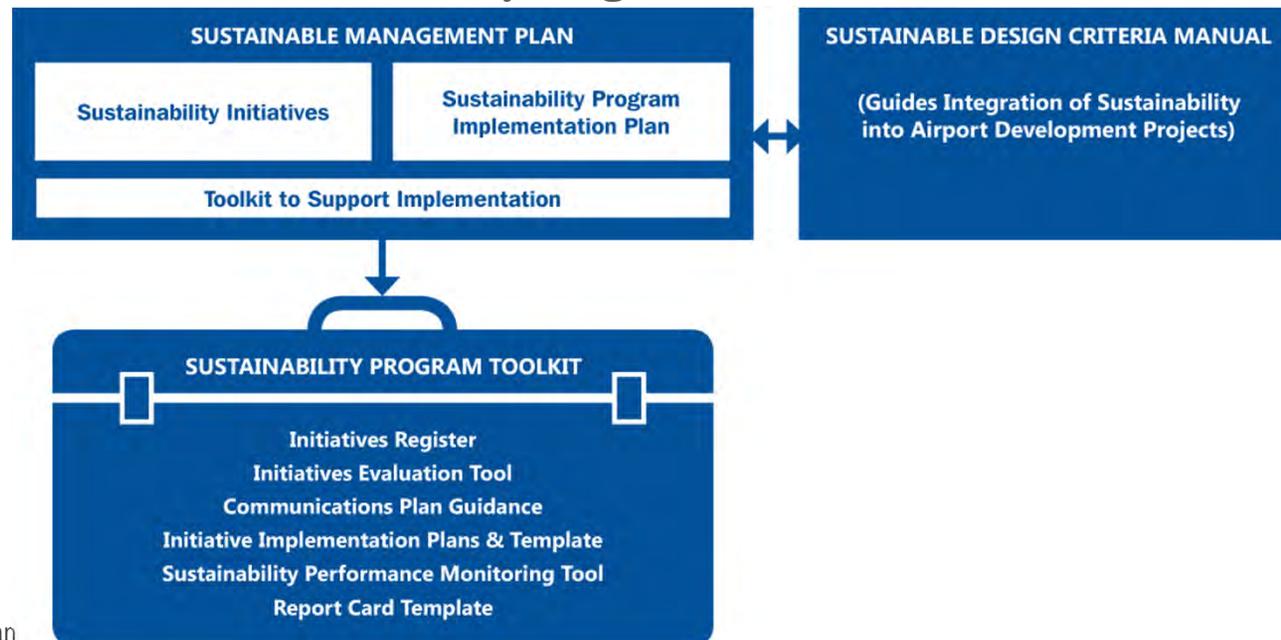
What is a Sustainable Management Plan?



PHASE 1: a collaborative process to set the sustainability planning foundation



PHASE 2: define the Sustainability Program



Sustainability Experience



- Sustainability is not new at TPA
- The Sustainable Management Plan built upon existing initiatives and partnerships

Airport-wide and in-flight recycling



Airside C cooling tower condensate recovery



Compressed Natural Gas (CNG) vehicles and private/public use CNG facility



Recycled water use in car washes



Use of reclaimed water for landscaping irrigation and cooling towers



Tampa International Airport is a Gold Member



Collaboration with our Community



- Stakeholders provided input on sustainability priorities and initiatives
- Authority staff participated throughout the project

Sustainable Management Plan

SUSTAINABILITY PROGRAM OVERVIEW



What Sustainability Means to Us



Sustainability is about making decisions that meet our needs today without compromising the ability to meet our needs in the future.

It's more than just **being green**.

It's about planning ahead and thinking holistically about the social, economic, environmental, and operational aspects of business at the Airport.

Simply put, sustainability means being responsible

to our
PEOPLE



to our
PLANET



and to our collective
PROSPERITY



Our Vision



To be **world-class leaders** in promoting **prosperity** for the Tampa Bay region through **efficient, responsible growth**, while cherishing the **natural beauty** and **quality of life** in our community.

Our Brand and Message



leaf

Tampa International Airport

Legacy of Environmental
Actions for our Future

Our Sustainability Priorities



Through collaboration with Airport stakeholders, seven sustainability priorities were identified, for which the Authority set sustainability goals



PEOPLE

Health, Safety,
and Security

Community



PLANET

Natural Systems
Management

Waste Management

Build Green and
Buy Green



PROSPERITY

Energy Management

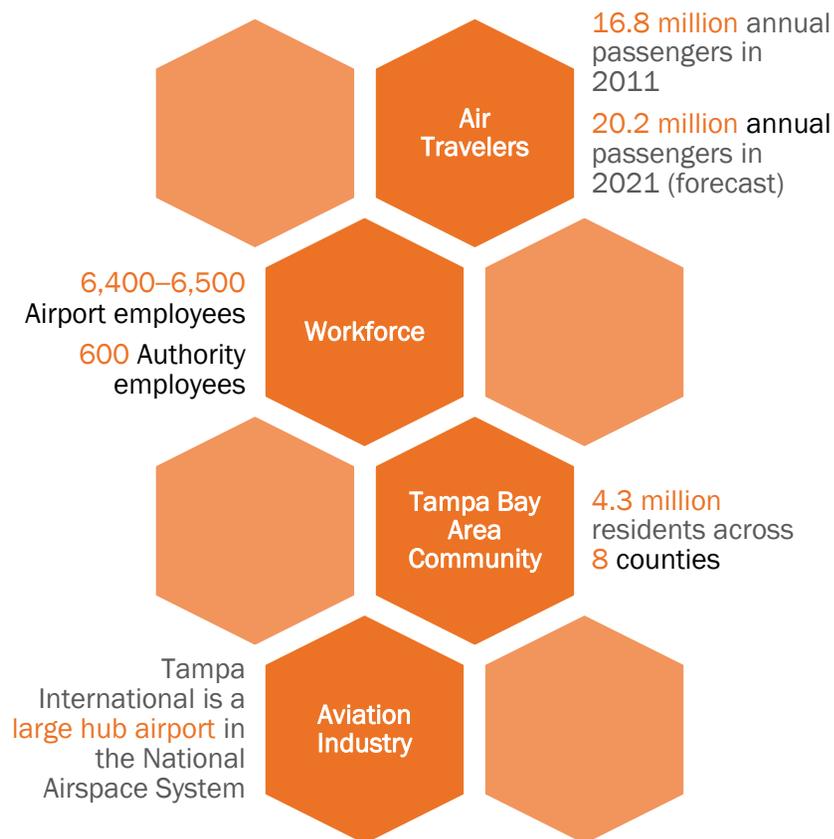
Regional Economic
Impact

Our Airport



- 2011 Baseline Conditions (consistent with Master Plan Update)
 - **8,409,650** annual enplaned passengers
 - **46,000** (approx.) daily passengers
 - **3,300**-acre campus
 - **3** runways ranging from **7,000** to **11,000** feet in length
 - **59** aircraft gates on **4** airside buildings
 - **23,000** (approx.) public parking spaces
- 2021 Future “Business as Usual” Conditions (consistent with the Master Plan Update’s 20-year planning horizon)
 - **10,110,800** (approx.) annual enplaned passengers (forecast)

“PEOPLE” Baseline – Community and Health, Safety, and Security



Implemented Initiatives Highlights

- Volunteer Ambassadors
- Employee health and well-being services
- Community event support
- Locally based concessions
- Airport Watch Program
- Annual reporting on public safety and security

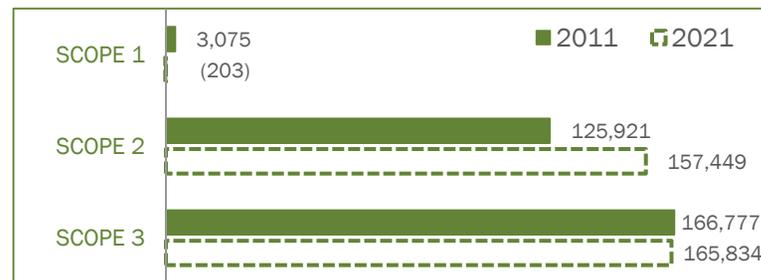
“PLANET” Baseline – Natural Systems



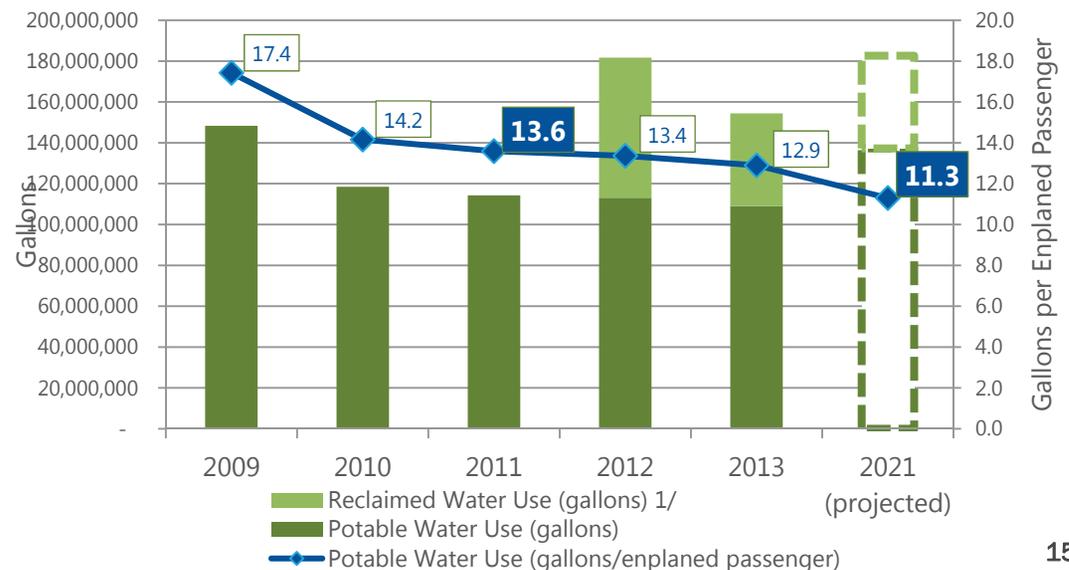
Implemented Initiatives Highlights

- Alternative fuel vehicles
- EV charging stations
- CNG fueling station
- Airside C Cooling Tower recovery and reuse of condensate
- Airside F Cooling Tower uses reclaimed water
- Reclaimed water used for irrigation
- Grass carp control algae in stormwater facilities

Greenhouse Gas Emissions



Annual Potable and Reclaimed Water Use (total gallons and gallons per enplaned passenger)



“PLANET” Baseline – Waste

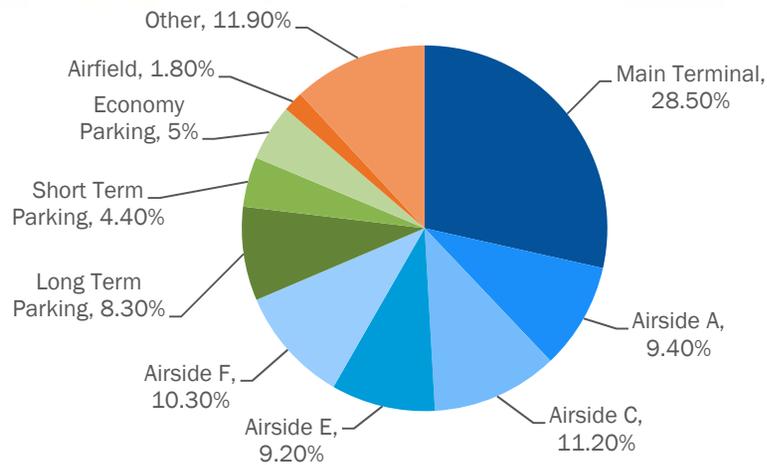


Implemented Initiative Highlights

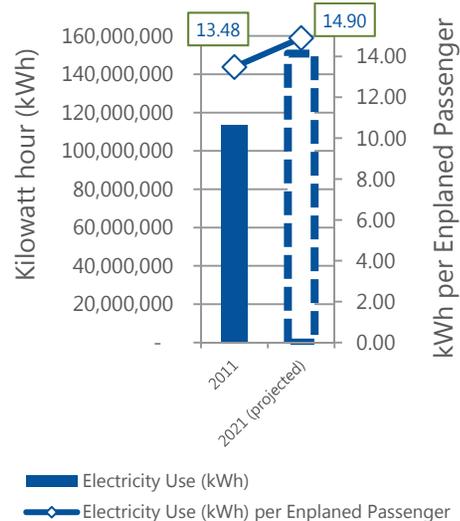
- Recycling program diverts over 20 different items from the waste stream through reuse and recycling
- HMS Host composting partnership with USF Botanical Garden and food donations to Feeding America Tampa Bay
- In-flight recycling



“PROSPERITY” Baseline – Energy



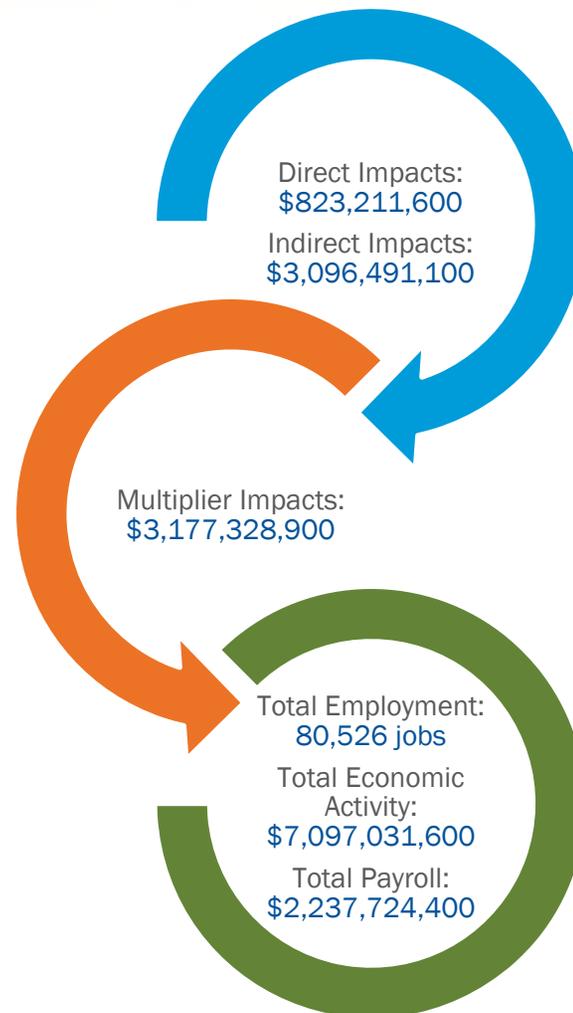
Electricity Use (percent use by facility [2012] and annual use [2011 and 2021])



Implemented Initiatives Highlights

- LED airfield lighting
- Airside F lighting replacement
- Building control system
- Non-peak baggage system energy conservation improvements

“PROSPERITY” Baseline – Economy



Our Sustainability Goals



PEOPLE

HEALTH, SAFETY, AND SECURITY

- Enhance the health, safety, and security of the Airport community
- Reassess disaster recovery plans in the context of changing circumstances (such as new facilities and evolving technology)
- Ensure safe and secure information technology and data systems

COMMUNITY

- Inspire sustainability actions throughout the Airport community
- Create a learning Airport community focused on continual improvement
- Exceed the expectations of our customers for a sustainable Airport experience
- Enhance links between the Airport and the Tampa Bay area community
- Support regional planning interests

Our Sustainability Goals



PLANET



NATURAL SYSTEMS MANAGEMENT

- Reduce greenhouse gas emissions (Scopes 1 and 2) on a per passenger basis by 5 percent by 2021 (compared with a 2011 baseline)
- Reduce potable water use on a per passenger basis by 10 percent by 2021 (compared with a 2011 baseline)
- Establish a target percent for low-maintenance, non-wildlife attracting species for each project involving landscaping
- Provide opportunities for people to experience the Tampa Bay area's natural environment

WASTE MANAGEMENT

- Reduce, reuse, and recycle to reduce the solid waste disposed on a per passenger basis by 10 percent by 2021 (compared with a 2011 baseline)
- Encourage zero-waste zones within the Airport campus

BUILD AND BUY GREEN

- Design and construct more environmentally responsible and energy efficient facilities using industry best practices and systems
- Promote sustainable procurement throughout the TPA community

Our Sustainability Goals



PROSPERITY

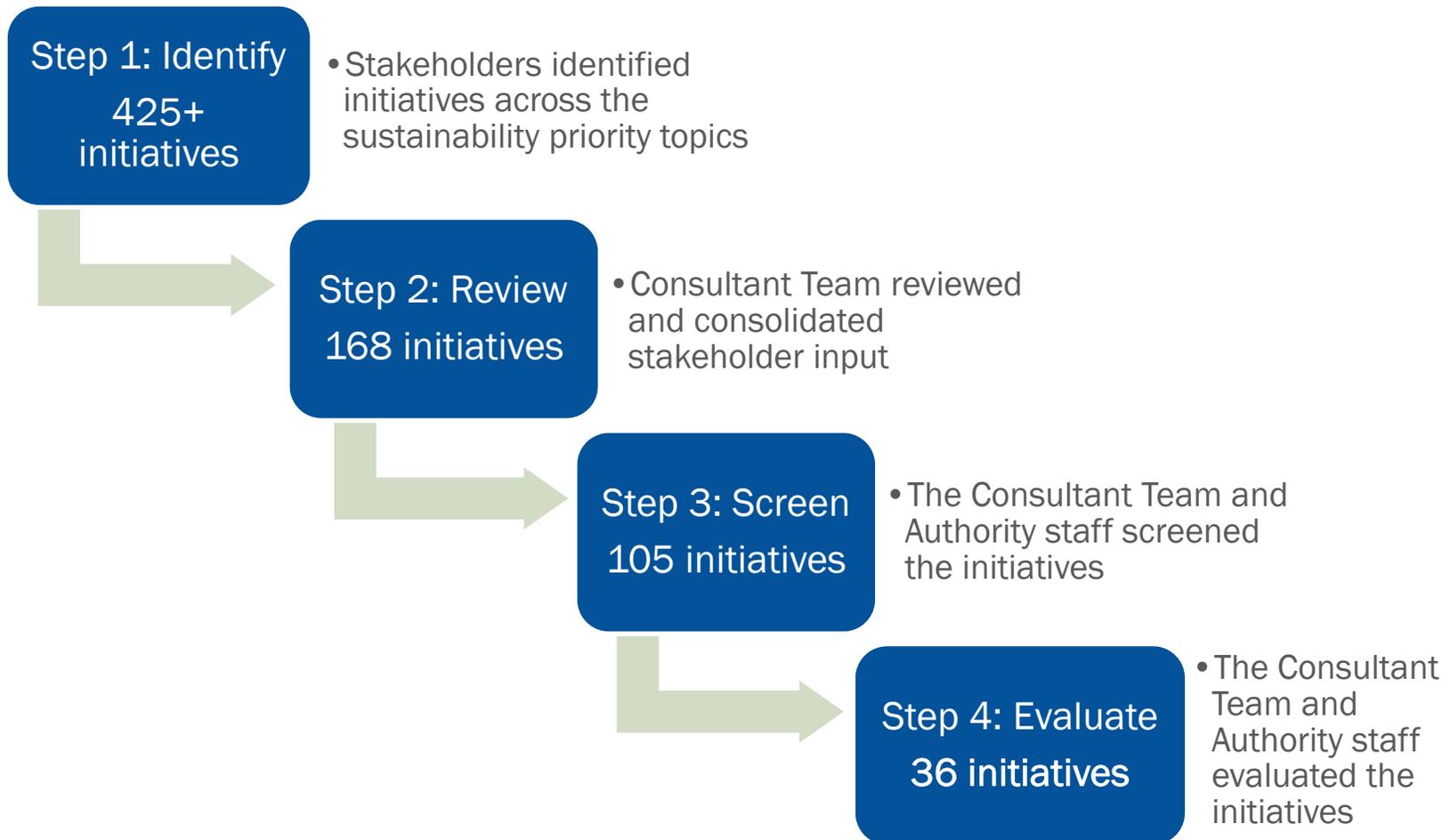
ENERGY MANAGEMENT

- Reduce electricity consumption on a per passenger basis by 3 percent by 2021 (compared with a 2011 baseline)
- Pursue strategies to reduce petroleum fuel use
- Promote the use of renewable energy sources over traditional energy sources

REGIONAL ECONOMIC IMPACT

- Pursue strategies to increase tenant revenues
- Support local, regional, and state efforts in attracting new business to the community
- Prioritize and implement financial flexibility through cost containment, access to capital, and contingency planning

Sustainability Initiatives



Sustainability Initiatives – PEOPLE



Develop an employee fitness program for all Airport workers (HCAA and tenants)			
Evaluate infrastructure resiliency and assess ability to operate without support from non-Airport systems (e.g., energy, water, waste disposal)			
Conduct a resiliency assessment			
Develop a sustainability employee engagement program to cultivate a culture of sustainability and innovation			
Partner with regional and industry organizations to further the mutual pursuit of sustainability			
Proactively support regional efforts to improve connectivity between the Airport and the local/regional community			
Engage the traveling public in sustainability			

Sustainability Initiatives – PLANET



Develop an action plan that provides a long-term roadmap for reducing GHG emissions			
Consider incorporation of rainwater harvesting into new construction and major renovation projects			
Develop a low-impact landscape maintenance program			
Consider opportunities to integrate natural elements into facilities			
Seek opportunities to showcase local organizations' efforts to protect and/or restore native habitats in the Tampa Bay area			
Improve the visibility, organization, and labeling of public recycling/trash collection points			
Provide temporary commingled recycling containers for use at special events held at the Airport			
Develop a sustainable fleet management program for Authority vehicles			
Explore opportunities to increase use of the Airport Compressed Natural Gas (CNG) station			
Develop a traffic management system to reduce congestion along the Airport access roadway			
Support regional connection to Airport People Mover (APM) system			

Sustainability Initiatives – PLANET



Identify and implement a zero-waste zone pilot project			
Reduce Authority paper use			
Expand the commingled recycling program to areas not currently covered			
Develop a composting program at TPA for public areas, food concessionaires, kitchens, greenhouses, or other relevant areas			
Advertise and promote recycling program results and best practices			
Implement and maintain a Sustainable Design Criteria Manual			
Prepare a facilities condition index to underpin a program to support capital decision-making regarding the Airport's facilities and assets			
Update program development procedures to integrate sustainability into the planning, programming, and implementation processes			
Define strategies to incorporate sustainability into procurement of services			
Define strategies to increase the procurement of sustainable goods, and share strategies with tenants, where appropriate			
Develop a "green IT" program			

Sustainability Initiatives – PROSPERITY



Continue replacement/retrofitting escalators in the Main Terminal with variable speed controllers			
Consider demand control ventilation strategies (CO ₂ sensors)			
Expand use of daylight harvesting controls that dim/turn off lighting in appropriate daylight conditions			
Explore partnership opportunity for a solar project			
Explore expanded renewable energy supply as an alternative to fossil fuel based systems			
Define an energy management program			
Incorporate life-cycle cost analyses into capital project decision-making			

Sustainable Design Criteria Manual



A Sustainable Design Criteria Manual was developed as part of the Sustainable Management Plan to guide the consideration of sustainability in design of the Authority's upcoming planned development program and other capital improvements.

Sustainable Management Plan

SUSTAINABLE DESIGN CRITERIA MANUAL FACT SHEETS & WORKSHEETS

SUSTAINABLE DESIGN FACT SHEET

NATURAL SYSTEMS MANAGEMENT: WATER

NSM-W-1 Water Efficient Landscaping

Last Updated: MM/00/YY

PURPOSE

XXXX

SUSTAINABILITY GOALS

- XXXX

DESIGN EVALUATION POINTS

- XXXX
- XXXX
- XXXX

SUSTAINABLE DESIGN STRATEGIES

- XXXX
- XXXX
- XXXX
- XXXX
- XXXX

SUSTAINABLE DESIGN CRITERIA MANUAL

SDCM: Criteria Applicability Fact Sheet

Project Name/Number: _____

There is a link to the SDCM project page on the website.

SDCM	Project Type	Rating	
		Accepted	Not Accepted
Natural Systems Management: Air	CM (Other) (e.g., transit, transit, walk, bicycle)		
A-1: Erosion & Sediment Control		Y	N
A-2: Alternative Transportation		Y	Y

SDCM: Project Evaluation Worksheet

Criteria	Application to Project	PRE-DESIGN		POST-DESIGN		SUMMARY
		Use of/Not	If Available, Initial Use to project	Final Approval/Not Approved	Final Use/Not Used	
Natural Systems Management: Air						
A-1: Erosion & Sediment Control (SUD)	Y					
A-2: Alternative Transportation	Y					
A-3: Landscaping & Irrigation Design to Reduce Heat Island	Y					
A-4: Landscaping & Exterior Design to Reduce Heat Island	N					
A-5: CFC Reduction	N					

FACT SHEET TOPICS

NATURAL SYSTEMS MANAGEMENT—AIR

- Erosion and Sediment Control—Dust
- Alternative Transportation
- Reduce Heat Islands
- Ozone-Depleting Chemicals and Refrigerant Management
- Exterior Air Quality

NATURAL SYSTEMS MANAGEMENT—WATER

- Erosion and Sediment Control—Stormwater Runoff
- Stormwater Management—Rate and Quality
- Water Efficient Landscaping
- Innovative Wastewater Technologies
- Water Use Reduction

NATURAL SYSTEMS MANAGEMENT—BIODIVERSITY

- Integrated Pest Management
- Wildlife Deterrence

WASTE MANAGEMENT

- Storage and Collection of Recyclables
- Infrastructure and Building Reuse
- Construction Waste Management
- Balanced Earthwork
- Salvaged Materials and Resources
- Planning for Deconstruction
- Construction/Contractor Staging Areas

SUSTAINABLE PROCUREMENT

- Furniture and Equipment
- Certified Wood Materials
- Rapidly Renewable Materials
- Recycled Content Materials
- Local/Regional Materials
- Low-emitting Materials
- Green IT

ENERGY MANAGEMENT

- Systems Commissioning
- Minimum Energy Performance
- Energy Performance Optimization
- Alternative and Renewable Energy
- Energy Measurement and Verification
- Daylighting
- Maintenance Requirements
- Systems Controls
- Thermal Comfort

HEALTH, SAFETY, AND SECURITY

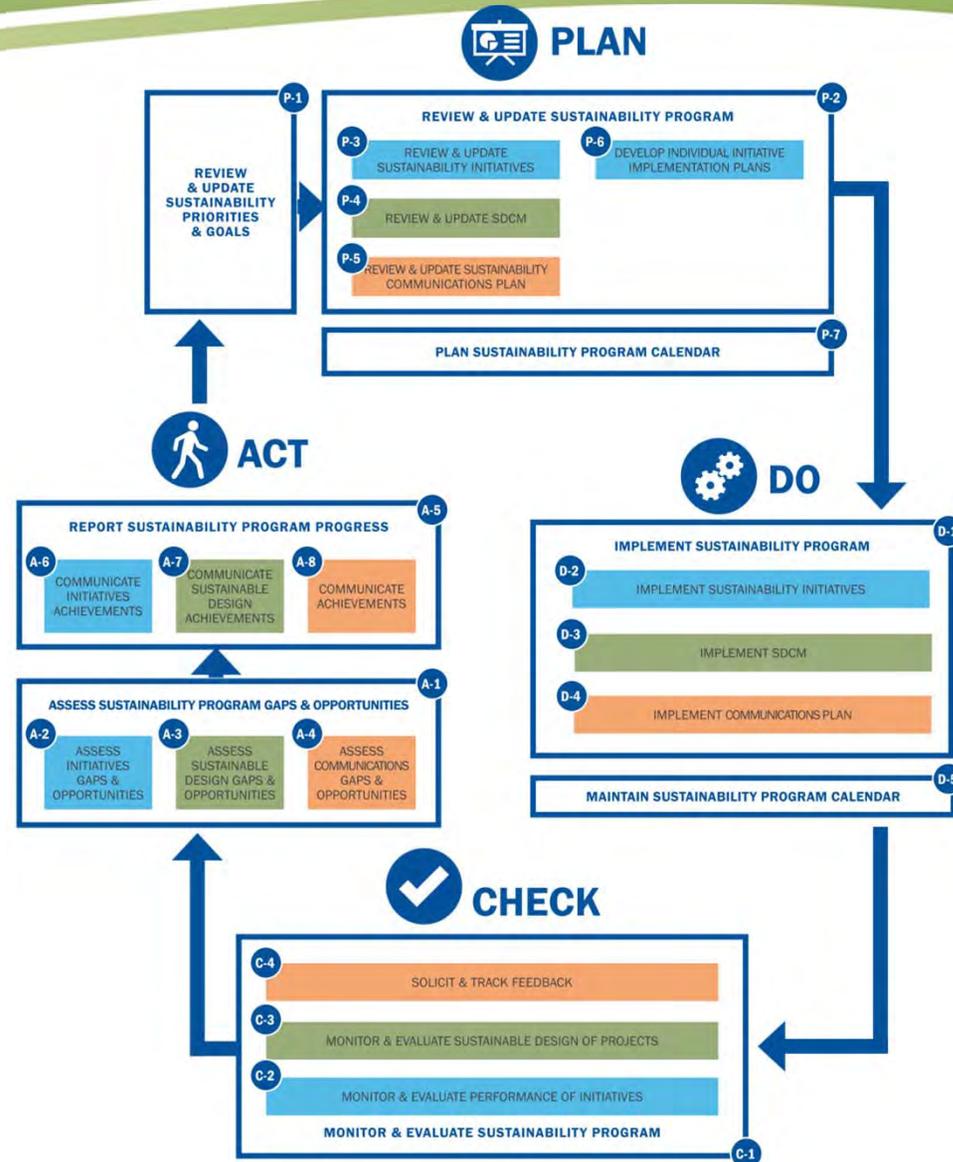
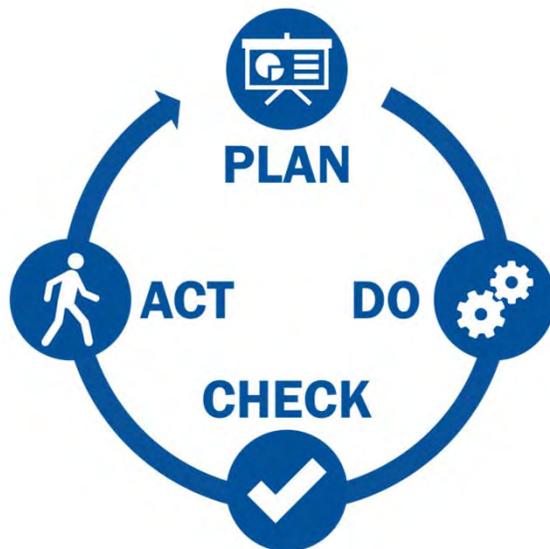
- Indoor Air Quality Performance
- Environmental Tobacco Smoke Control
- Carbon Dioxide Monitoring
- Indoor Chemical and Pollutant Source Control
- Construction Indoor Air Quality Management

COMMUNITY

- Light Pollution Reduction
- Exterior Views
- Noise and Acoustical Quality
- Consistency with Local and Regional Plans
- Placemaking

Management of Sustainability

Our Sustainability Management Plan is based on the Continuous Improvement Model





THANK YOU!

