SITES V2 RATING SYSTEM

Designing with the Sustainable Sites Initiative in Mind

HISTORY

- Collaborative effort
  - American Society of Landscape Architects Fund
  - The Lady Bird Johnson Wildlife Center at The University of Texas at Austin
  - The United States Botanic Garden
- Since 2007 SITES has published three reports that include draft guidelines and performance benchmarks, followed by extensive review of public comments.
- 2009 – Version 1 (*Guidelines and Performance Benchmarks*) released.
- Field-tested through a two-year pilot program involving more than 160 projects nationwide.
- Currently owned by Green Business Certification Inc. (GBCI)

SITES CENTRAL MESSAGE

"…Any project – whether the site of a university campus, large subdivision, shopping mall, park, commercial center, or even a home – holds the potential to protect, improve, and regenerate the benefits and services provided by healthy ecosystems."

Images Sources: Grecorailings.com/godfreyhirst.com/thetechnologicalcitizen.com

SITES BENEFITS & VALUES

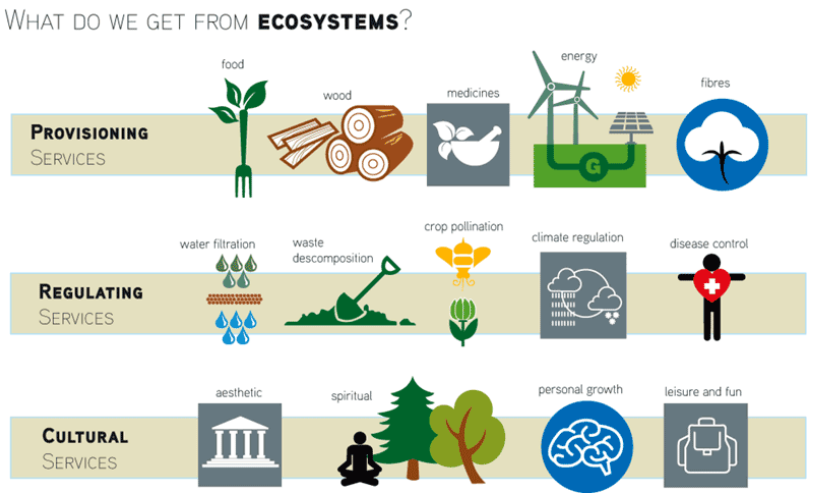
- Advances best practices in landscape architecture and other environmental design professions
- Helps design professionals fulfill their **health, safety, and welfare** responsibilities for licensure
- Clients can be assured their project has achieved rigorous, field-tested standards for sustainability
- Clients can market SITES certification for their projects
- Ethically responsible, protects natural systems for present-day use and appreciation, and preserves ecosystem services for future generations

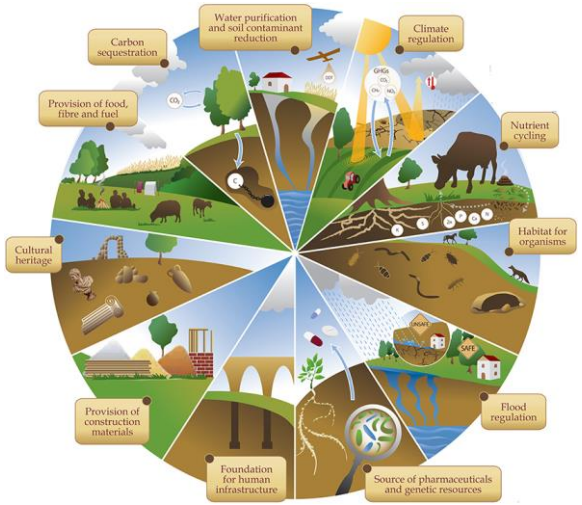
SITES GUIDING PRINCIPLES

- Do no harm
- Apply the precautionary principle
- Design with nature and culture
- Use a decision-making hierarchy of preservation, conservation, and regeneration
- Provide regenerative systems as intergenerational equity
- Support a living process
- Use a systems thinking approach
- Use a collaborative and ethical approach
- Maintain integrity in leadership and research
- Foster environmental stewardship

ECOSYSTEM SERVICES

"Goods and services of direct or indirect benefit to humans that are produced by ecosystem processes that involve the interactions of living elements, such as vegetation and soil organisms, and non-living elements such a bedrock, water, and air."





Images Sources: researchgate.net/www.ehu.eus/www.frontiersin.org

MILLENNIUM ECOSYSTEM ASSESSMENT

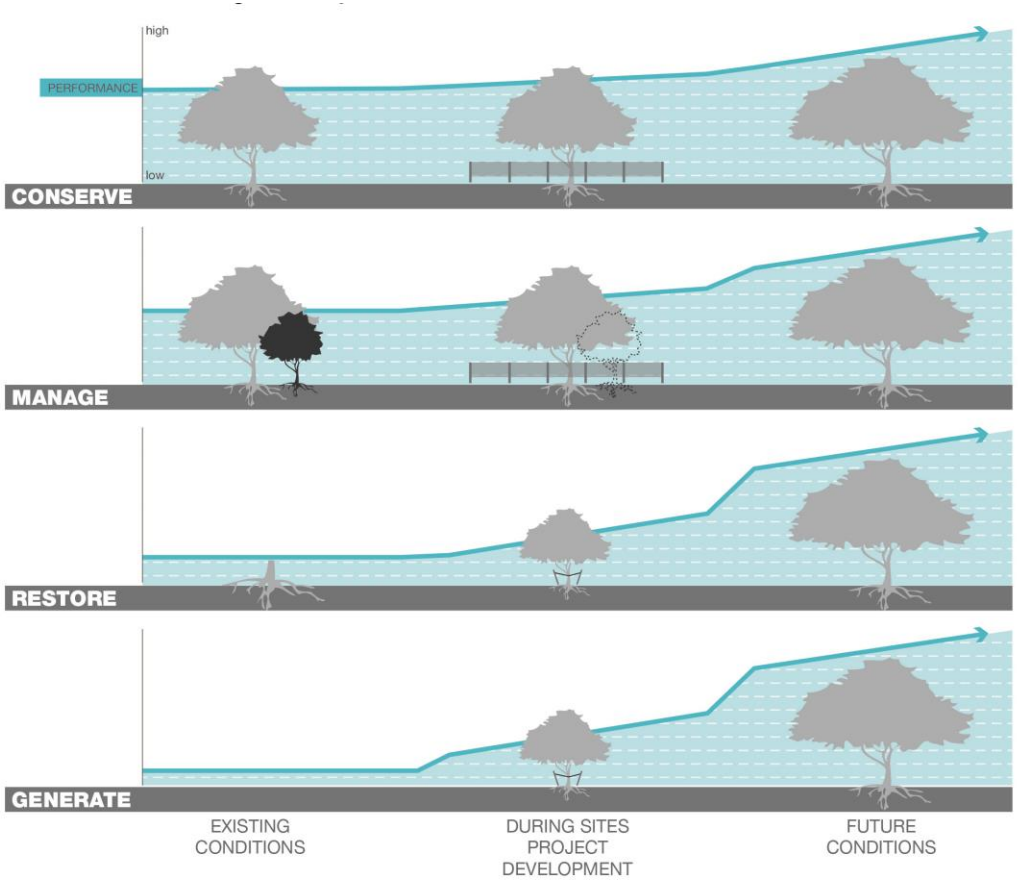
- Supporting – services that are necessary for the production of all other ecosystem services
- Provisioning – products, such as food and water, obtained from ecosystems
- Regulating – benefits obtained from the regulation of ecosystem processes such as carbon sequestration
- Cultural – nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences

ECOSYSTEM SERVICES

- Global climate regulation
- Local climate regulation
- Air & water cleansing
- Water supply retention
- Erosion & sedimentation control
- Hazard mitigation
- Pollination
- Habitat functions
- Waste decomposition & treatment
- Human health & Well-being
- Food & renewable non-food products
- Cultural benefits

DECISION-MAKING HIERARCHY

Provided by the *Sites Guiding Principles* - gives projects a step-by-step framework for approaching existing site elements in order to conserve, manage, restore, or generate high-functioning ecosystems.



GOALS FOR SITES V2

1. Create Regenerative Systems and Foster Resiliency
2. Ensure Future Resource Supply and Mitigate Climate Change
3. Transform the Market through Design, Development, and Maintenance Practices
4. Enhance Human Well-Being and Strengthen Community

ELIGIBLE SITE – WHERE & WHEN TO USE

- "Site" is physical location or land on which a "project" is developed
- New construction as well as existing sites that include major renovation
- No maximum size but minimum 2,000 square feet
- Projects located on site with/without buildings including:
  - Open spaces – local, state, and national parks, botanic gardens, arboretums
  - Streetscapes and plaza
  - Commercial retail and office areas, corporate campuses
  - Residential o neighborhood or individual yards
  - Educational/institutional – pubic and private campuses, museums, hospitals
  - Infrastructure
  - Government
  - Military
  - Industry

USE & UNDERSTAND

- Consists of 18 prerequisites and 48 credits = 200 potential points for measuring project sustainability.
- Bonus points for projects that employ innovative and exemplary performance strategies
- 10 sections
- Prerequisite requirements must be met for a project to be considered for certification.
- All credits are considered optional: however, a certain number of credit points must be approved for a project to achieve certification.
- Not all credits will apply to every project but array of credits provides multiple opportunities to achieve certification

RATING SYSTEM SUMMARY

1. Site Context
2. Pre-Design Assessment + Planning
3. Site Design – Water
4. Site Design – Soil + Vegetation
5. Site Design – Materials Selection
6. Site Design – Human Health + Well-Being
7. Construction
8. Operations + Maintenance
9. Education + Performance Monitoring
10. Innovative or Exemplary Performance

SCORECARD

Project Name: _____ Project ID#:_____ Date: _____

SITES v2 Scorecard Summary

YES	?	NO	1: SITE CONTEXT		Possible Points:	13
0	0	0				
Y			CONTEXT P1.1	Limit development on farmland		
Y			CONTEXT P1.2	Protect floodplain functions		
Y			CONTEXT P1.3	Conserve aquatic ecosystems		
Y			CONTEXT P1.4	Conserve habitats for threatened and endangered species		
			CONTEXT C1.5	Redevelop degraded sites		3 to 6
			CONTEXT C1.6	Locate projects within existing developed areas		4
			CONTEXT C1.7	Connect to multi-modal transit networks		2 to 3

YES	?	NO	2: PRE-DESIGN ASSESSMENT + PLANNING		Possible Points:	3
0	0	0				
Y			PRE-DESIGN P2.1	Use an integrative design process		
Y			PRE-DESIGN P2.2	Conduct a pre-design site assessment		
Y			PRE-DESIGN P2.3	Designate and communicate VSPZs		
			PRE-DESIGN C2.4	Engage users and stakeholders		3

YES	?	NO	3: SITE DESIGN - WATER		Possible Points:	23
0	0	0				
Y			WATER P3.1	Manage precipitation on site		
Y			WATER P3.2	Reduce water use for landscape irrigation		
			WATER C3.3	Manage precipitation beyond baseline		4 to 6
			WATER C3.4	Reduce outdoor water use		4 to 6
			WATER C3.5	Design functional stormwater features as amenities		4 to 5
			WATER C3.6	Restore aquatic ecosystems		4 to 6

YES	?	NO	4: SITE DESIGN - SOIL + VEGETATION		Possible Points:	40
0	0	0				
Y			SOIL+VEG P4.1	Create and communicate a soil management plan		
Y			SOIL+VEG P4.2	Control and manage invasive plants		
Y			SOIL+VEG P4.3	Use appropriate plants		
			SOIL+VEG C4.4	Conserve healthy soils and appropriate vegetation		4 to 6
			SOIL+VEG C4.5	Conserve special status vegetation		4
			SOIL+VEG C4.6	Conserve and use native plants		3 to 6
			SOIL+VEG C4.7	Conserve and restore native plant communities		4 to 6
			SOIL+VEG C4.8	Optimize biomass		1 to 6
			SOIL+VEG C4.9	Reduce urban heat island effects		4
			SOIL+VEG C4.10	Use vegetation to minimize building energy use		1 to 4
			SOIL+VEG C4.11	Reduce the risk of catastrophic wildfire		4

YES	?	NO	5: SITE DESIGN - MATERIALS SELECTION		Possible Points:	41
0	0	0				
Y			MATERIALS P5.1	Eliminate the use of wood from threatened tree species		
			MATERIALS C5.2	Maintain on-site structures and paving		2 to 4
			MATERIALS C5.3	Design for adaptability and disassembly		3 to 4
			MATERIALS C5.4	Use salvaged materials and plants		3 to 4
			MATERIALS C5.5	Use recycled content materials		3 to 4
			MATERIALS C5.6	Use regional materials		3 to 5
			MATERIALS C5.7	Support responsible extraction of raw materials		1 to 5
			MATERIALS C5.8	Support transparency and safer chemistry		1 to 5
			MATERIALS C5.9	Support sustainability in materials manufacturing		5
			MATERIALS C5.10	Support sustainability in plant production		1 to 5

YES	?	NO	6: SITE DESIGN - HUMAN HEALTH + WELL-BEING		Possible Points:	30
0	0	0				
			HHWB C6.1	Protect and maintain cultural and historic places		2 to 3
			HHWB C6.2	Provide optimum site accessibility, safety, and wayfinding		2
			HHWB C6.3	Promote equitable site use		2
			HHWB C6.4	Support mental restoration		2
			HHWB C6.5	Support physical activity		2
			HHWB C6.6	Support social connection		2
			HHWB C6.7	Provide on-site food production		3 to 4
			HHWB C6.8	Reduce light pollution		4
			HHWB C6.9	Encourage fuel efficient and multi-modal transportation		4
			HHWB C6.10	Minimize exposure to environmental tobacco smoke		1 to 2
			HHWB C6.11	Support local economy		3

YES	?	NO	7: CONSTRUCTION		Possible Points:	17
0	0	0				
Y			CONSTRUCTION P7.1	Communicate and verify sustainable construction practices		
Y			CONSTRUCTION P7.2	Control and retain construction pollutants		
Y			CONSTRUCTION P7.3	Restore soils disturbed during construction		
			CONSTRUCTION C7.4	Restore soils disturbed by previous development		3 to 5
			CONSTRUCTION C7.5	Divert construction and demolition materials from disposal		3 to 4
			CONSTRUCTION C7.6	Divert reusable vegetation, rocks, and soil from disposal		3 to 4
			CONSTRUCTION C7.7	Protect air quality during construction		2 to 4

YES	?	NO	8. OPERATIONS + MAINTENANCE		Possible Points:	22
0	0	0				
Y			O+M P8.1	Plan for sustainable site maintenance		
Y			O+M P8.2	Provide for storage and collection of recyclables		
			O+M C8.3	Recycle organic matter		3 to 5
			O+M C8.4	Minimize pesticide and fertilizer use		4 to 5
			O+M C8.5	Reduce outdoor energy consumption		2 to 4
			O+M C8.6	Use renewable sources for landscape electricity needs		3 to 4
			O+M C8.7	Protect air quality during landscape maintenance		2 to 4

YES	?	NO	9. EDUCATION + PERFORMANCE MONITORING		Possible Points:	11
0	0	0				
			EDUCATION C9.1	Promote sustainability awareness and education		3 to 4
			EDUCATION C9.2	Develop and communicate a case study		3
			EDUCATION C9.3	Plan to monitor and report site performance		4

YES	?	NO	10. INNOVATION OR EXEMPLARY PERFORMANCE		Bonus Points:	9
0	0	0				
			INNOVATION C10.1	Innovation or exemplary performance		3 to 9

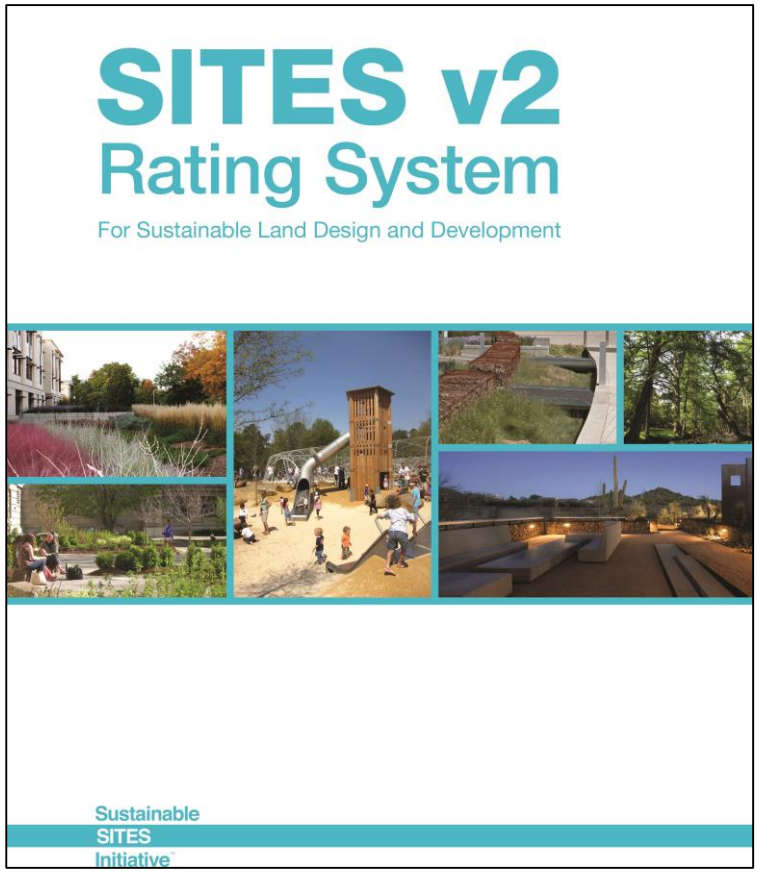
YES	?	NO	TOTAL ESTIMATED POINTS	Total Possible Points:	200
0	0	0			

KEY	
YES	Project confident points are achievable
?	Project striving to achieve points, not 100% confident
NO	Project is unable to achieve these credit points

SITES Certification levels	Points
CERTIFIED	70
SILVER	85
GOLD	100
PLATINUM	135

SITES RESOURCES

- WWW.SUSTAINABLESITES.ORG
  - SITES Rating System & Scorecard
  - SITES Reference Guide
  - Synergies Between SITES & LEED
  - GBCI Trademark Policy & Branding Guidelines
  - AP Exam Study Guide



CONCLUDING THOUGHTS

Images Sources: www.nreionline.com/www.xinaps.com/www.lionhouse.eu