

## GreenScapes Environmentally Beneficial Landscaping

## Building Sustainable Sites From the Ground Up

# **GreenScapes** is:

 <u>Multi-media</u> EPA Partnership Program designed to promote a wide variety of <u>sustainable</u> landscape design, construction and land management practices.



## **GreenScapes** is:

 Designed to help preserve natural resources and prevent waste and pollution by encouraging more holistic decisions regarding waste, water, chemicals, energy, and land use.



# **GreenScapes** is:

 Designed to provide cost-efficient and environmentally friendly solutions - improving both an organization's bottom-line and the environment.



#### Think about:

- Millions of tons of waste materials that are
  - Hauled away to a landfill,
  - Buried, or
  - Burned
  - Each and every day from landscape construction & maintenance operations:
  - Trees
  - Shrubs,
  - Brush
  - Lumber
  - Asphalt
  - Concrete, etc...





#### Also, consider the millions of gallons of:

- Water
- Pesticides
- Fertilizers
- Fuels
- Oil





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Used each & every day in building and maintaining these lands.

#### Make more holistic and <u>sustainable</u> decisions regarding use of:

- Materials & waste
- Soil
- Water
- Chemicals
- Air
- Plant material
- Energy
- Land (preservation & restoration)



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The GreenScapes Solution: Focus on the 4 Rs

- Reduce
- Reuse
- RecycleRebuy



#### The Economic & Environmental Benefits of *GreenScaping*: • Reduced equip. maint. –

- Reduced water use
- Reduced irrigation costs

   water & energy
- Reduced plant growth
- Reduced plant maintenance
- Reduced waste generation
- Reduced labor time & cost (maint. & disposal)
- Reduced equipment operating times

- Reduced equip. maint. labor & supplies
- Reduced fuel use
- Reduced emissions
- Reduced fertilizer use material & labor savings
- Reduced pesticide use material & labor savings
- Reduced nonpoint source pollution
- Reduced exposure to hazardous materials
- Reduce insurance costs?





- Material cost savings
- Labor cost savings
- Equal or superior performance
- = \$\$\$ for you / your customer



 Improved competitive edge with reduced costs and improved materials & energy efficiency.

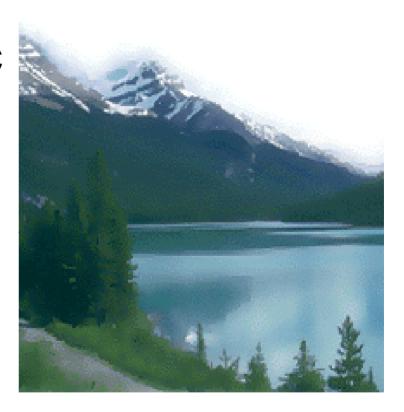


- Reduced exposure to
- your customers, employees, and yourself from potentially harmful chemicals, solvents, fuels, and pesticides.





Improved public perception of your business.





- Knowledge that you are making a difference by:
  - –helping prevent pollution
  - -saving natural resources
  - –curbing climate change
  - -reducing your "environmental footprint" on the Earth.

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#### **The GreenScapes Alliance**

EPA Partnership program to implement & promote "green" landscape practices

#### Partners & Allies



#### **GreenScapes Alliance:**

- A growing group of organizations, large and small, coming together to promote green landscape practices.
- Currently 85+ organizations including: US Green Building Council & American Society of Landscape Architects



#### **GreenScapes Alliance:**

- Provides state-of-the-art recommendations and Best Management Practices (BMPs)
- Web-based menu of options & resources
   Multi-media
   Technical information (specs, guidelines, research)



#### National Recognition Program & Case Studies

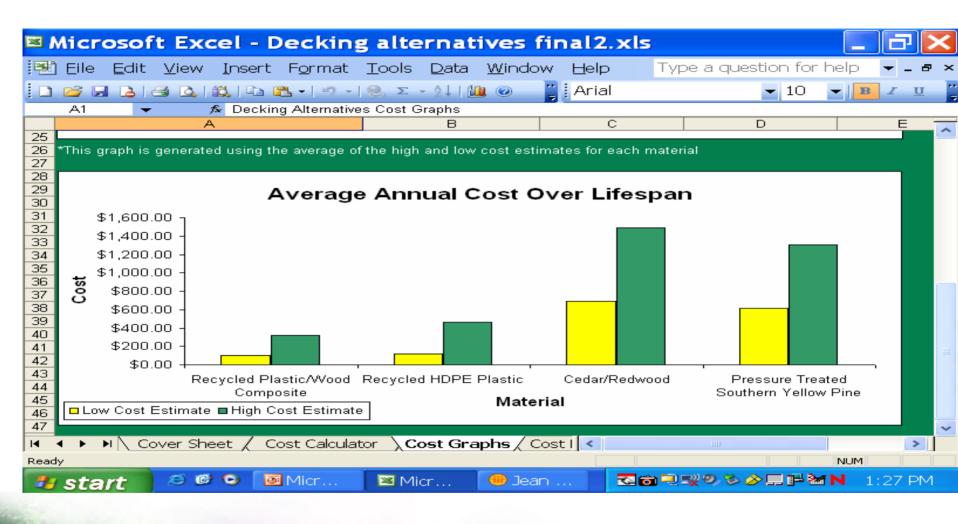




#### Development of On-line Cost/Benefit Calculators

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2		Environmental	Ily Beneficial Landscaping		
3	Input				
<u>4</u> 5	Area of Deck (Sq. Feet)	600			
6					
7	Recycled HDPE Plastic	Low Cost Estimate Hig	h Cost Estimate		
8	Cost of Materials	\$1,296.00	\$5,356.80		
9	Cost of Installation	\$2,100.00	\$4,350.00		
10	Initial Cost	\$3,396.00	\$9,706.80		
11	Cost of Maintenance (annual)	\$0.00	\$0.00		
12	Disassembly, Removal and Disposal Cost	\$1,800.00	\$1,800.00		
<u>13</u> 14	Lifespan (years) 3 <i>year Cost</i>	50 \$3,396.00	25 \$9,706.80		
15	6 year Cost	\$3,396.00	\$9,700.80 \$9,706.80		
16	10 year Cost	\$3,396.00	\$9,706.80		
17	Lifetime Cost	\$5,196.00	\$11,506.80		
18	Average Annual Cost over Lifetime	\$103.92	\$460.27		
19					
20	Recycled Plastic/Wood Composite	Low Cost Estimate Hig			
21	Cost of Materials	\$1,872.00	\$3,120.00		
22	Cost of Installation	\$2,100.00	\$3,150.00		
23	Initial Cost	\$3,972.00	\$6,270.00	\$5,121.00	~
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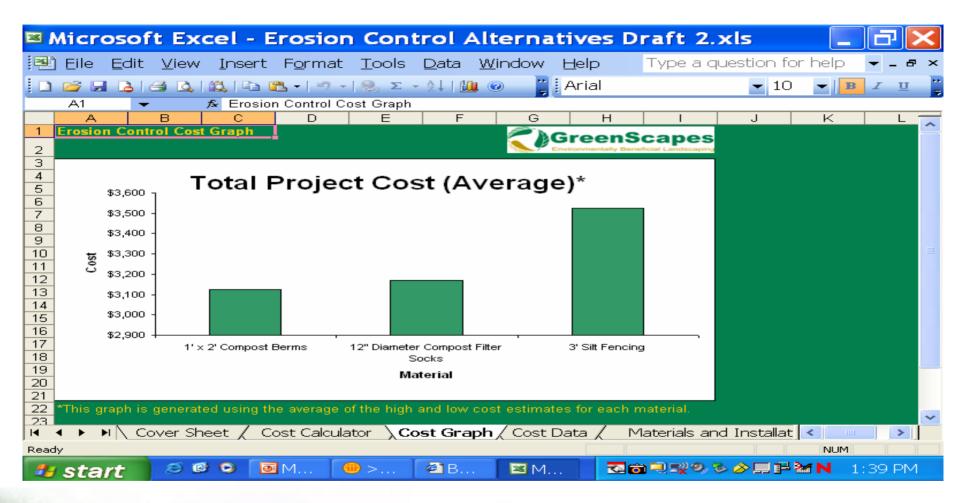






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4	Lenth of Erosion Control (Linear Feet)		400						
5	Duration of Project (Months)		6						
	Would Compost be Removed from Site?								
6	(usually not required)		no						
7						_			
8	1' x 2' Compost Berms	Low Cos	t Estimate	High C	ost Estimate	_			
9	Materials and Installation Cost		\$1,044		\$1,260				
10	Regular Inspection and Sediment Removal Cost		\$1,800		\$1,800				
11	Repair and Replacement Cost		\$157		\$189				
12	Compost Removal Cost		\$0		\$0				
	Total Cost		\$3,001		\$3,249	2			
14	12" Discussion Company Films Conde	1		Illinity C	The second	_			
15	12" Diameter Compost Filter Socks Materials and Installation Cost	Low Cos	<mark>at Estimate</mark> \$1,200	nign C	ost Estimate \$1,400	_			
	Regular Inspection and Sediment Removal Cost		\$1,200 \$1,800		\$1,400 \$1,800				
	Repair and Replacement Cost		<u>\$1,000</u> \$54						
19	Sock Removal and Disposal Cost		<u>\$16</u>		\$16	· .			
20	Compost Removal Cost		<u>\$0</u>		\$0	-			
21	Total Cost		\$3,070		\$3.270				
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1 Inputs 2						
3 General Information						
4 Total Landscape Area (Sq. Feet)	30000					
5 How long is your growing season (in months)? 6 Your Water Bill						
7 Does your facility pay for water?	Yes 🔽					
8 What type of rate do you have?	Per Gallon 📃					
9 Cost per 1000 gallons (\$)	\$3.00					
10 -						
11 -						
12 Current Landscape Maintenance Who maintains your facility's landscape?						
13	A private landscaping firm 🔫					
14 What is the landscaper's travel time (in minutes)?	30					
15 How many times does the firm visit per year?	6					
16 Your Current Landscape						
17 Area in Regular Watering Zone (Sq. Feet)	20000					
18 Area in Occasional Watering Zone (Sq. Feet)	5000					
19 Area in Natural Rainfall Zone (Sq. Feet)	5000					
20 Area of Flower Beds (Sq. Feet)	2500					
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# GreenScapes

 Member of the ASLA Product Development Committee for the Practice Guidelines and Metrics for the Sustainable Sites tools.

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(Sunday 4pm)

#### **GreenScapes is also working with:**

- Federal EMS (environmental management systems) development of green landscaping guidance – will be posted on both the GreenScapes web page and Fedcenter.gov
- The Federal "Green Highways" initiative

 Both encourage more "sustainable" construction & maintenance practices



#### The Future is Now – Get Ahead of the Game

- More Federal, State, and local gov'ts will spec "sustainable" & "low impact development" techniques & technologies
- More commercial businesses are requiring "greener" practices and products - The US Green Building Council LEEDs
- Businesses are seeing the GREEN in "green"

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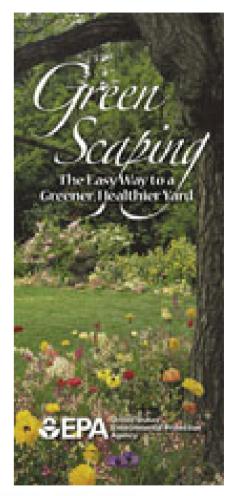
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#### **GreenScapes for Homeowners**

Launched September 2006 Education & Outreach campaign

Message: Save <u>Time & Money</u>

Stimulate demand for "greener" landcare products and services





## **Please Join Us for Part II**

- Building Sustainable Sites From the Ground Up Water
- 12:45 2:15 Room M100G
  - Low Impact Development
  - Designing for Water Efficiency
  - Irrigation: Latest Techniques & Technologies

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# For more info and to Join Us... www.epa.gov/greenscapes (exhibit booth 118)

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Sample of resources here & booth

- Contact: Jean Schwab
- Email: schwab.jean@epa.gov