

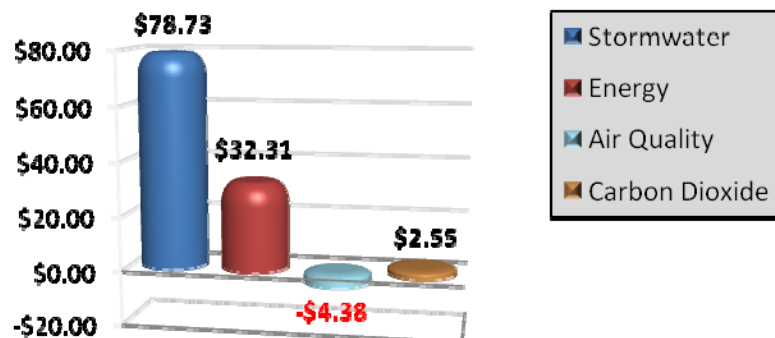
## Trees Work 4 Nevada!

Trees are working 24/7 to preserve the quality of life in Nevada. Trees protect our critical water resources by intercepting and storing stormwater, reducing erosion and keeping particulates and impurities from polluting streams, rivers, and lakes. Trees improve air quality by producing oxygen (O); intercepting particulate matter (PM<sub>10</sub>) such as dust, ash, pollen, and smoke; and absorbing gaseous pollutants like ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>). Urban trees in neighborhoods and business districts reduce energy needs by shading structures and lowering ambient air temperatures. Trees reduce atmospheric carbon dioxide (CO<sub>2</sub>) directly through growth and sequestration of CO<sub>2</sub> as woody and foliar biomass, and indirectly by lowering the demand for heating and air conditioning, thereby reducing emissions that result from the generation of electricity and natural gas consumption. Besides contributing to the attractiveness of our communities and homes, it's easy to see that trees are also providing benefit services critical to the health and welfare of Nevada. The i-Tree suite of software ([www.itreetools.org](http://www.itreetools.org)), developed by the USDA Forest Service, allows us to quantify the true value of these services.

Developed through cooperation with the USDA Forest Service, Arbor Day Foundation, Society of Municipal Arborists, International Society of Arboriculture and Davey Tree Experts, i-Tree *Streets* provides benefit assessment tools for urban forest managers analyzing the environmental services of trees and community forests. *Streets* assesses tree population structure and function, calculating the dollar value of annual resource services for energy savings, atmospheric carbon reduction, stormwater runoff reduction, air quality and aesthetic contributions. i-Tree *Streets* was used to quantify the benefits of Twenty-five of Nevada's Big Trees. Results are shown below.

Wondering what your tree is doing for you? Check out the National Tree Calculator at [www.treebenefits.com](http://www.treebenefits.com) for an estimate of the annual services provided by your tree.

### Western 'Sierra' juniper, *Juniperus occidentalis*



Total Annual Benefits: \$109.22

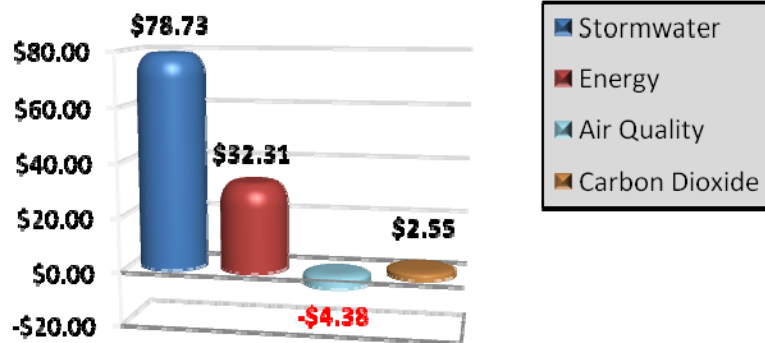
Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value:

\$31,399.53

**California white fir, *Abies concolor 'lowiana'***



Total Annual Benefits: \$109.22

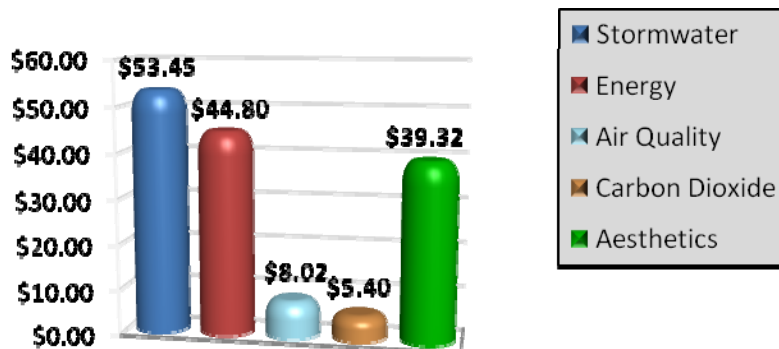
Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value:

\$31,399.53

**London planetree, *Platanus X acerifolia***



Total Annual Benefits:

\$150.99

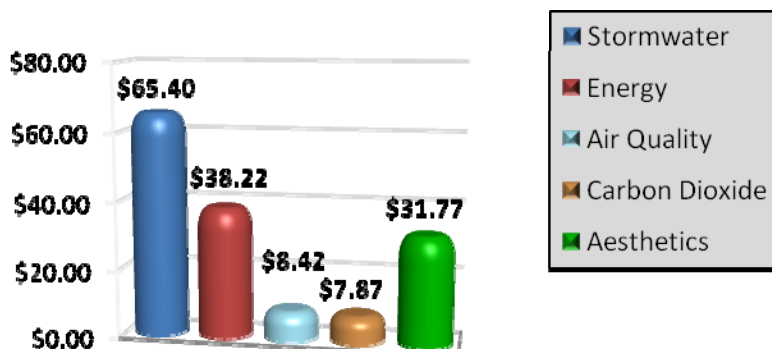
Total Stored CO<sub>2</sub>: 16.84 Tons

Value of CO<sub>2</sub>: \$252.56

Replacement Value:

\$32,426.17

**Silver maple, *Acer saccharinum***



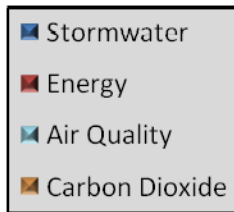
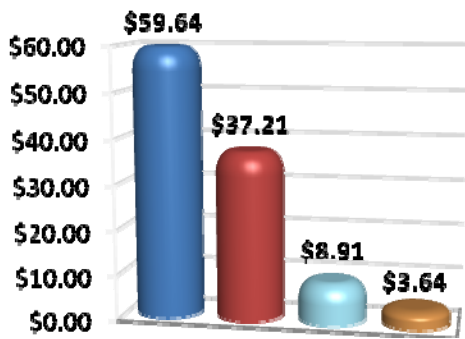
Total Annual Benefits: \$151.68

Total Stored CO<sub>2</sub>: 20.28 Tons

Value of CO<sub>2</sub>: \$304.27

Replacement Value: \$20,313.21

**Eastern cottonwood, *Populus deltoides***



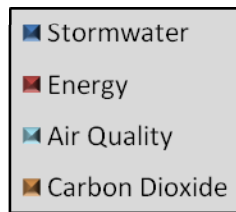
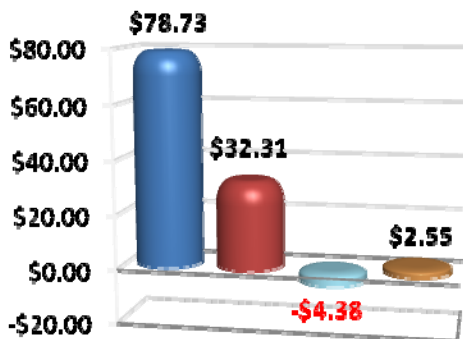
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$17,432.66

**Incense cedar, *Calocedrus decurrens***



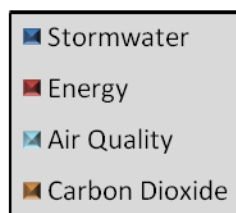
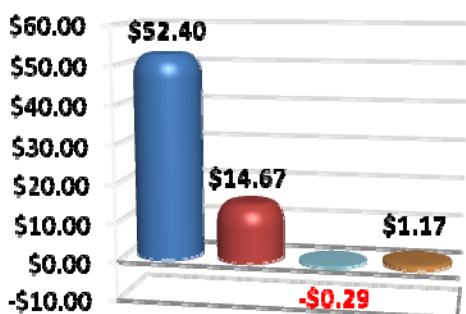
Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value: \$30,158.49

**Western white pine, *Pinus monticola***



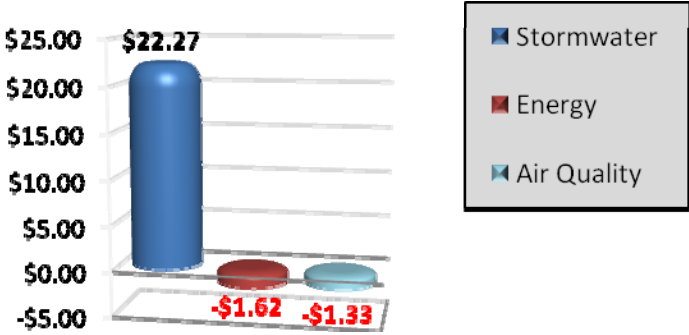
Total Annual Benefits: \$67.96

Total Stored CO<sub>2</sub>: 2.45 Tons

Value of CO<sub>2</sub>: \$36.70

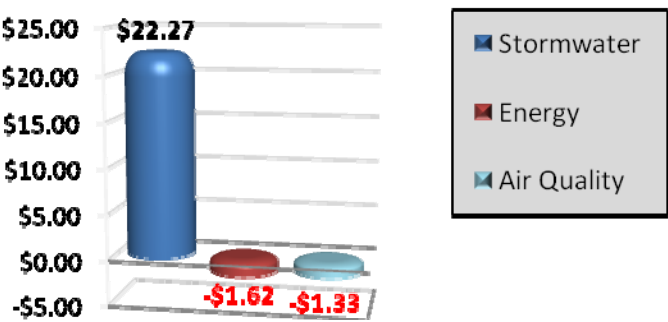
Replacement Value: \$27,215.52

**Great Basin bristlecone, *Pinus aristata 'longaeva'***



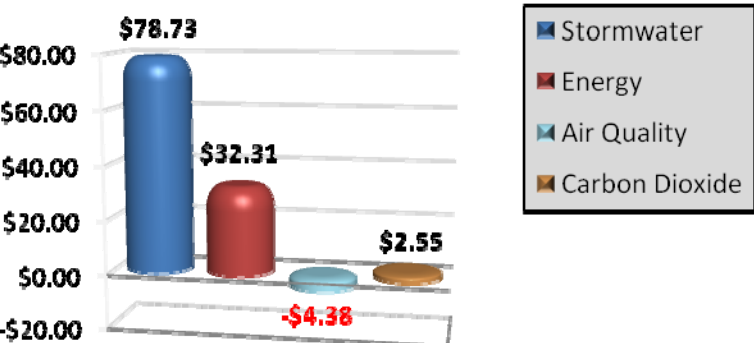
Total Annual Benefits: \$19.32  
Total Stored CO<sub>2</sub>: 852.51 Pounds  
Value of CO<sub>2</sub>: \$6.39  
Replacement Value: \$17,630.93

**Mountain hemlock, *Tsuga mertensiana***



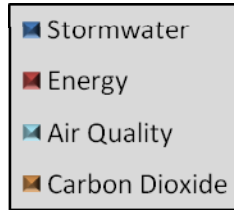
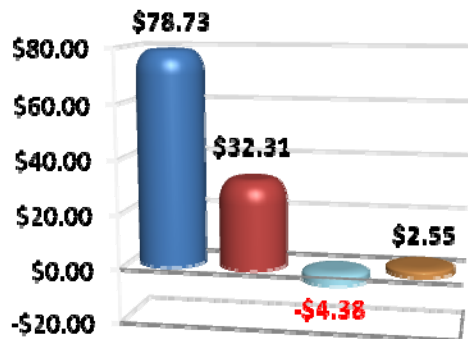
Total Annual Benefits: \$19.32  
Total Stored CO<sub>2</sub>: 852.51 Pounds  
Value of CO<sub>2</sub>: \$6.39  
Replacement Value: \$17,630.93

**California red fir, *Abies magnifica***



Total Annual Benefits: \$109.22  
Total Stored CO<sub>2</sub>: 7.33 Tons  
Value of CO<sub>2</sub>: \$109.93

**Jeffrey pine, *Pinus jeffreyi***



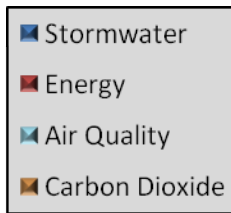
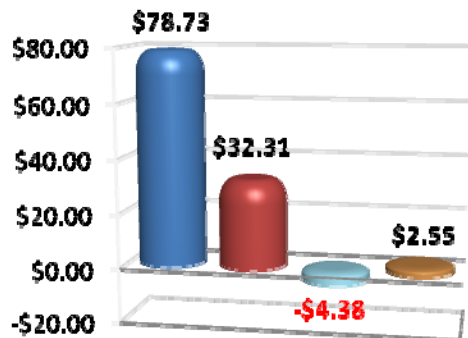
Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value: \$30,158.49

**Sugar pine, *Pinus lambertiana***

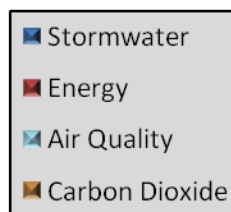
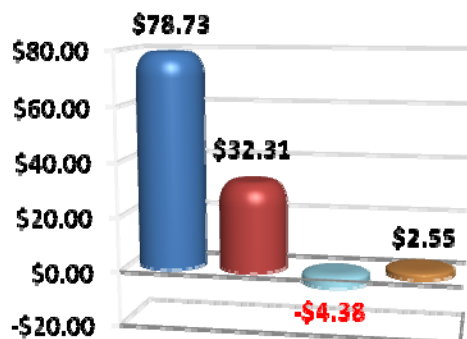


Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

**Rocky Mountain white fir, *Abies concolor***



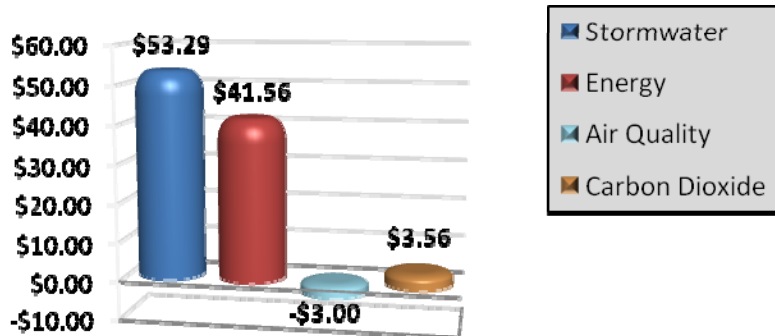
Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value: \$31,399.53

### Ponderosa pine, *Pinus ponderosa*



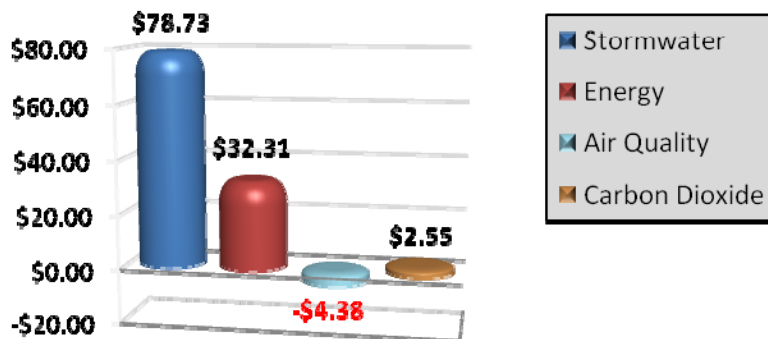
Total Annual Benefits: \$95.42

Total Stored CO<sub>2</sub>: 3.75 Tons

Value of CO<sub>2</sub>: \$56.18

Replacement Value: \$23,662.77

### Giant sequoia, *Sequoiadendron giganteum*

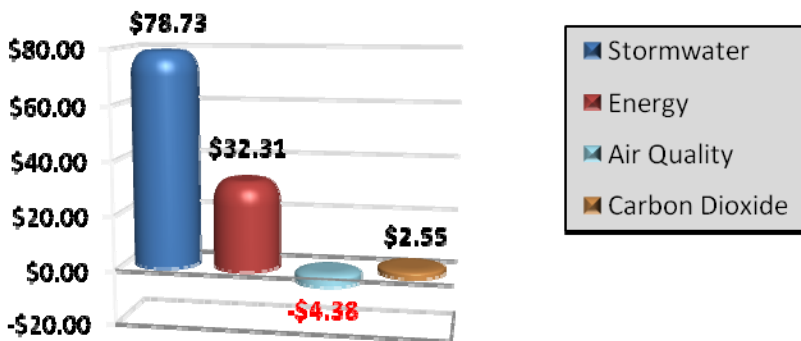


Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

### Rocky Mountain ponderosa, *Pinus ponderosa 'scopulorum'*



Total Annual Benefits: \$109.22

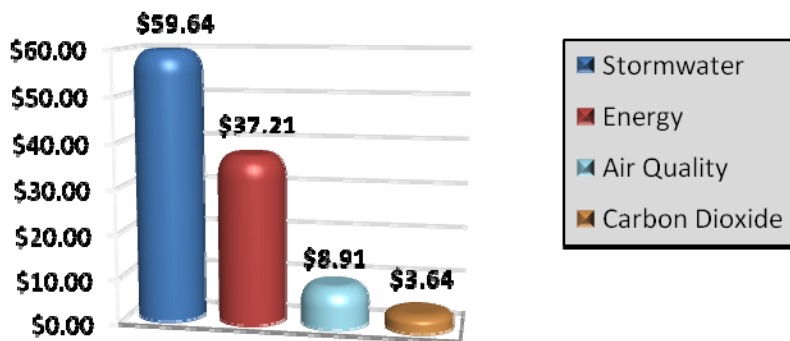
Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

Replacement Value:

\$23,662.77

### Black cottonwood, *Populus trichocarpa*

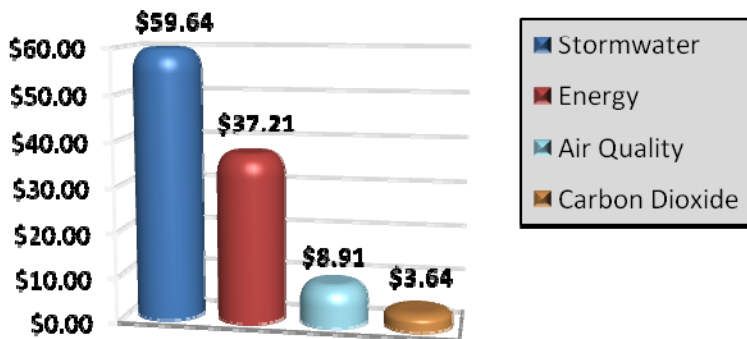


Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

### White poplar, *Populus alba* 'Pyramidalis'



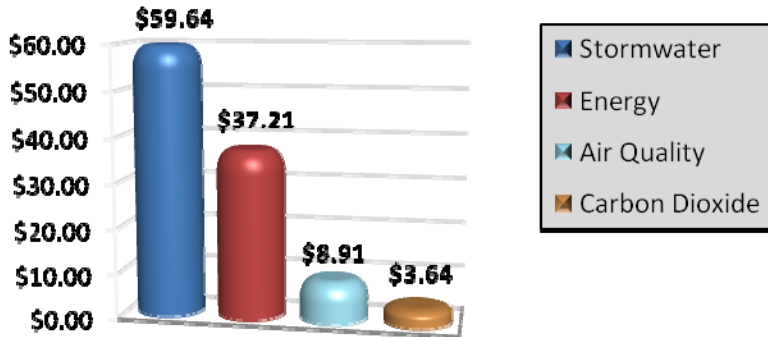
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$17,432.66

### Narrowleaf cottonwood, *Populus angustifolia*



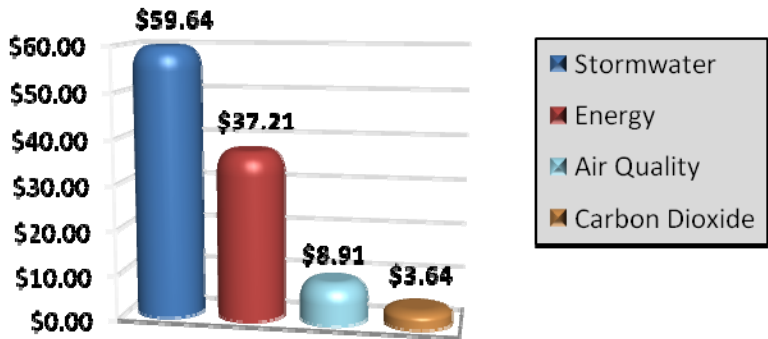
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$17,432.66

### Fremont cottonwood, *Populus fremontii*



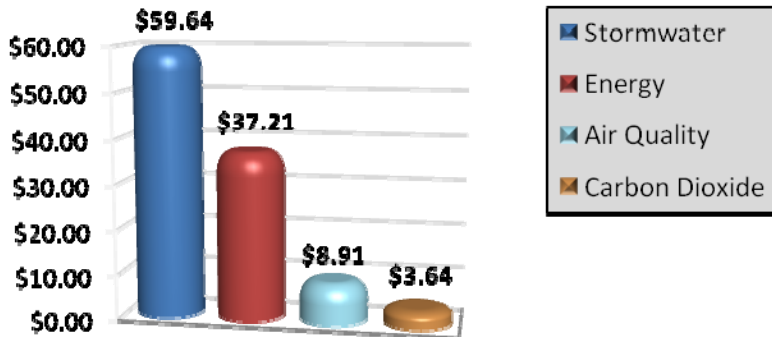
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$17,432.66

### Black poplar, *Populus nigra*



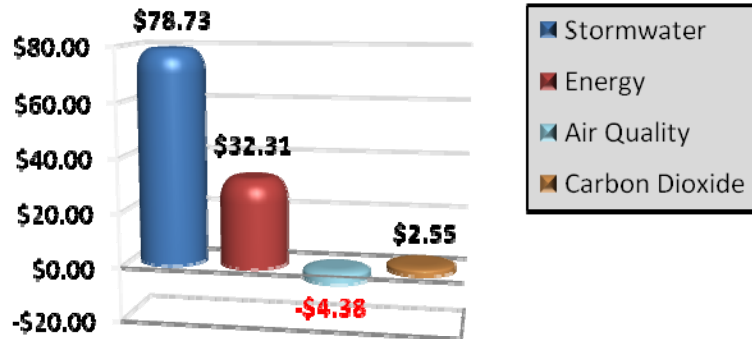
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57



**Douglas fir, *Pseudotsuga menziesii***

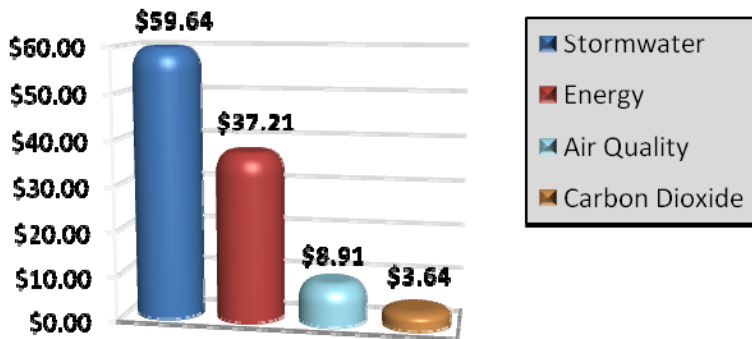


Total Annual Benefits: \$109.22

Total Stored CO<sub>2</sub>: 7.33 Tons

Value of CO<sub>2</sub>: \$109.93

**Valley oak, *Quercus lobata***

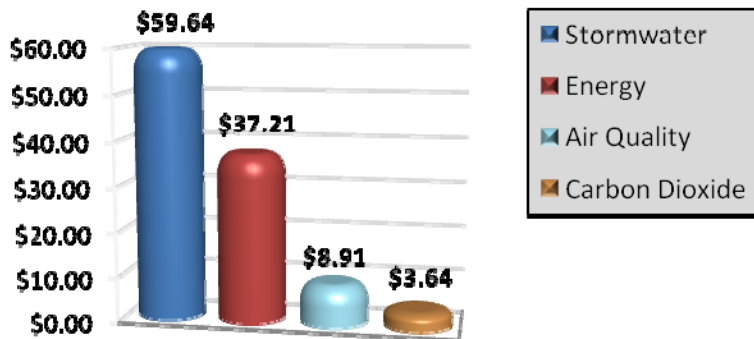


Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

**Black locust, *Robinia pseudoacacia***



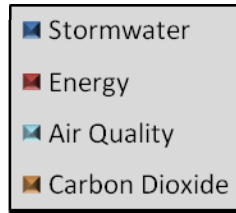
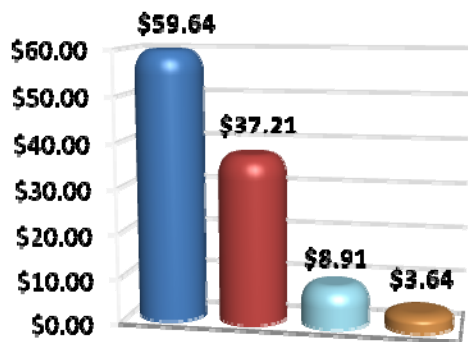
Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$21,905.97

## Black willow, *Salix nigra*



Total Annual Benefits: \$109.41

Total Stored CO<sub>2</sub>: 12.97 Tons

Value of CO<sub>2</sub>: \$194.57

Replacement Value: \$15,185.24