

# Construction of a Rain Garden



**Location: Stevens Point Airport**

**by S. Kufahl - AmeriCorps**

**Water Quality & Conservation Educator**

**- Aug 2011 -**

The following is a pictorial presentation of the construction of the rain garden that is adjacent to the Solar Building located at the Stevens Point Airport in August of 2011.

It was constructed there to help alleviate some stormwater drainage issues and also as an educational tool for the city to educate its citizens on Rain Gardens in general.

ENJOY the SHOW !!

**RAIN GARDEN IS LOCATED BY THE SOLAR BUILDING AT THE STEVENS POINT AIRPORT.**

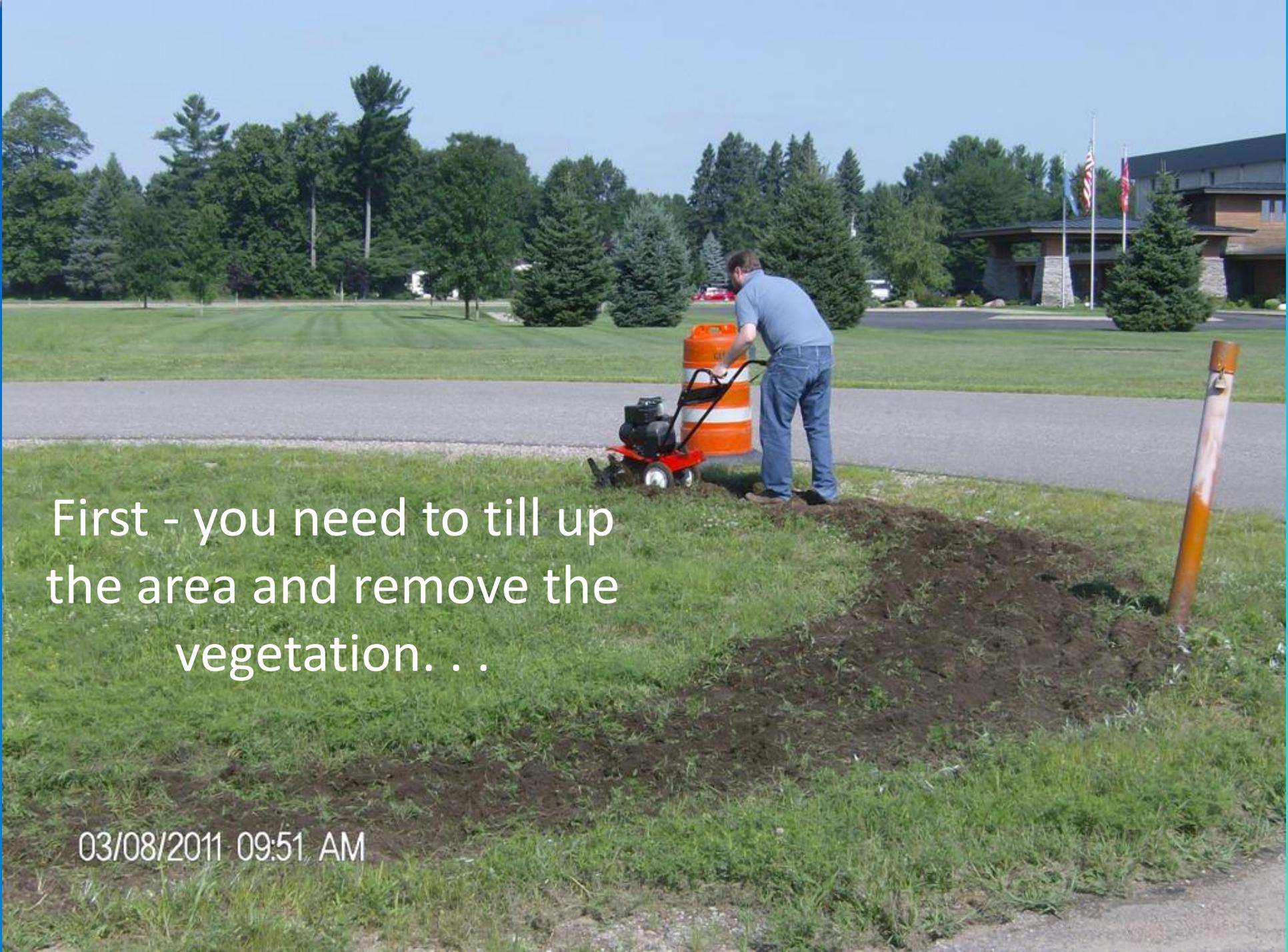
# MUNICIPAL AIRPORT

FBO



FLIGHT INSTRUCTION  
AIRCRAFT MAINTENANCE  
AIRCRAFT RIDES & RENTAL

10/09/2011 08:25 AM

A man in a blue shirt and jeans is operating a red and black tillage machine on a golf course. The machine is pulling a large orange and white striped barrel. The man is standing on a patch of dark, tilled soil, with a paved path and a green lawn in the background. In the distance, there are trees and a building with flags. A wooden post is visible on the right side of the frame.

First - you need to till up  
the area and remove the  
vegetation. . .

03/08/2011 09:51 AM



03/08/2011 10:27 AM

**More tilling and raking  
out the sod clumps.**



And Raking out the clumps of sod  
continues . . .

03/08/2011 10:27 AM



**More  
Tilling, raking  
and weeding.  
(1 hour into  
project.)**

03/08/2011 10:43 AM

Almost done with the prep work.



03/08/2011 11:10 AM



Flowering plants are laid out in their locations. Joe from AmeriCorps – is happy to show off some of his work.

03/08/2011 11:31 AM

03/08/2011 12:44 AM



**Once plants are laid out - you can start planting.**

**Guy, from AmeriCorps, has been busy planting some flowering plants.**

**All the flowering plants are in!  
We are half done planting...**



03/08/2011 01:33 PM

(Four hours into project.)

**Grasses and sedges are placed in between  
the flowering perennials.**



03/08/2011 02:40 PM



**Once laid out in position,  
it's Time to start planting  
the grasses and sedges.**

03/08/2011 02:25 PM

(About five hours into project.)

You need to  
make sure the  
hole is deep  
enough to  
contain the  
entire root  
system.

03/08/2011 02:25 PM



**Then place plant in the hole,  
fill the hole, and firmly tamp around  
plant to remove any air pockets.**

03/08/2011 03:11 PM





Plant id label sticks.

03/08/2011 03:34 PM  
(About 6 hours  
into project.)

**Plants are all in, along with Plant  
identification label sticks –  
helpful for weeding purposes.**



**Planting is complete.**

**To finish - you need to place 2-3 inches  
of mulch around plants to hinder weed  
growth and keep moisture.**

03/08/2011 03:34 PM



**A look at  
the almost  
complete Rain  
Garden.**

03/08/2011 03:33 PM

**Now, If Mother Nature does not provide,  
you must water after planting and then at least 2-3  
times a week until plants are well established.**



03/08/2011 03:46 PM



**Rain Garden with Mulch around the plants.  
Just need to finish placing the mulch  
around the perimeter of garden and the  
installation is complete.**

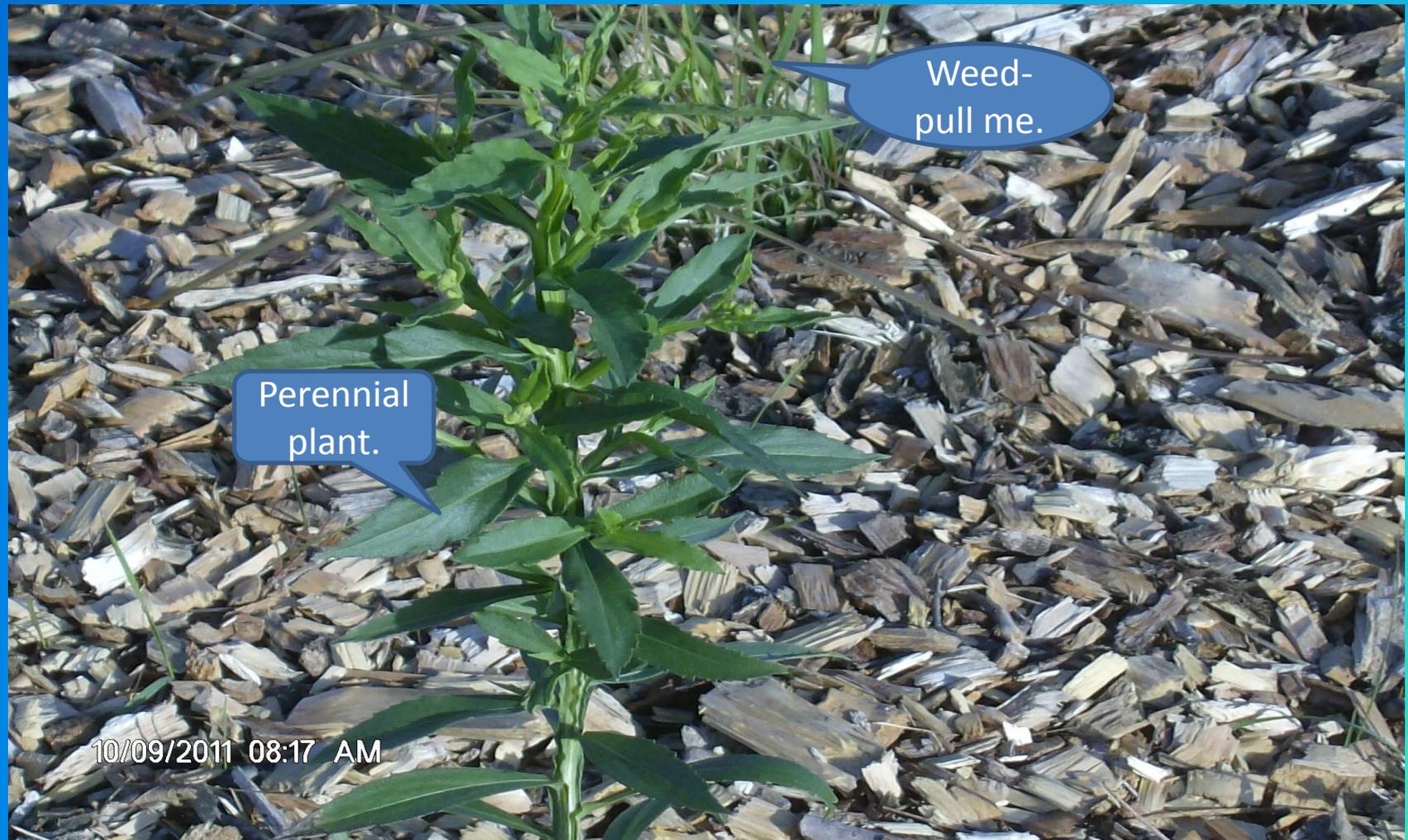
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Don't forget to water 2-3 times a week until the plants are established.



10/09/2011 08:21 AM

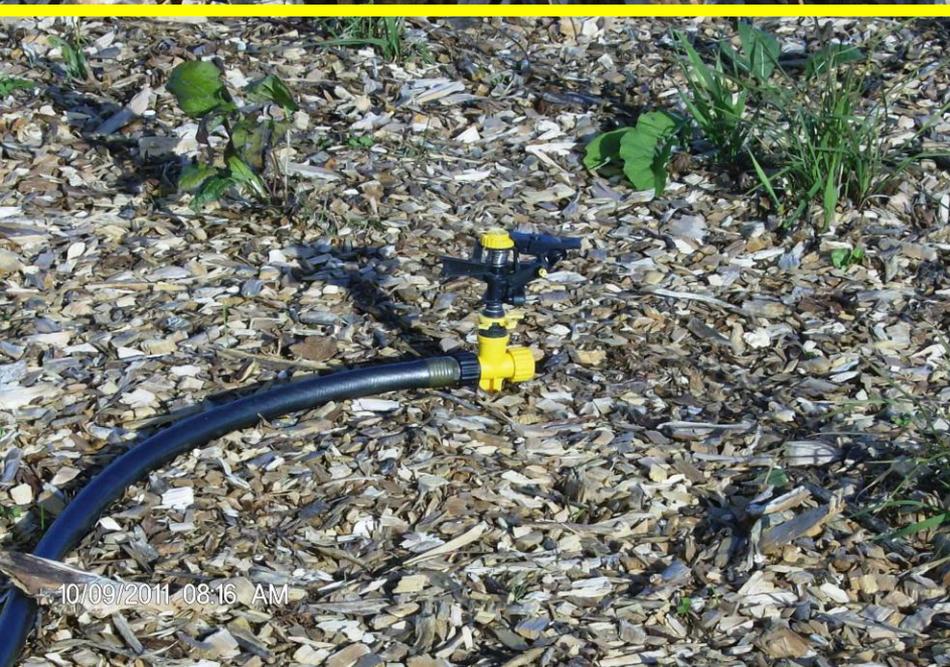
Weeding of the garden should be done until the perennials, along with the grasses and sedges have taken hold.



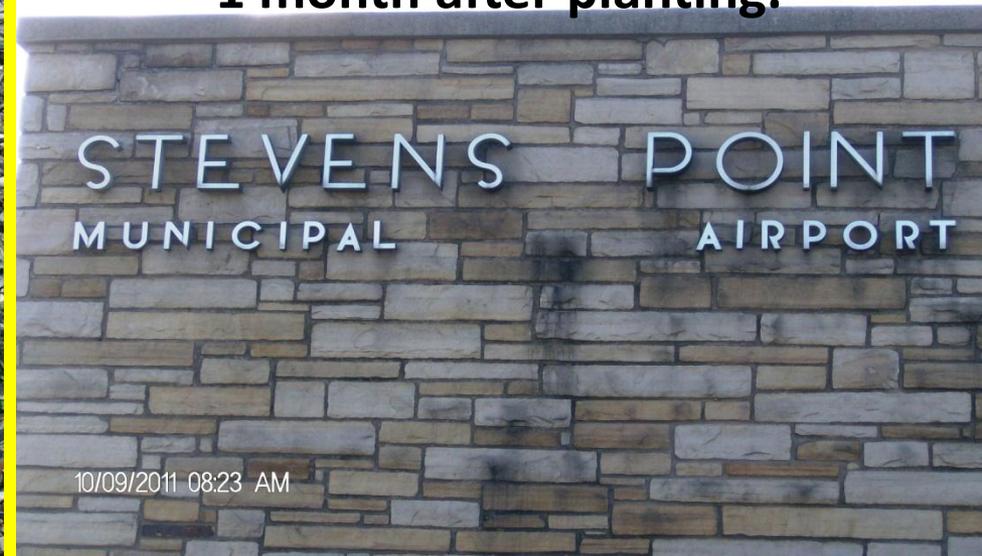


One of our plants is showing a bud on Sept. 10<sup>th</sup>, 2011.

Planting was done on August 3, 2011.



**Pictures of Airport Rain Garden taken  
1 month after planting.**



# Pictures of specific plants used in rain garden.



**BROWN-EYED SUSAN**



**NORTHERN IRIS**

Pictures of specific plants used in rain garden.



**PRAIRIE BLAZINGSTAR**

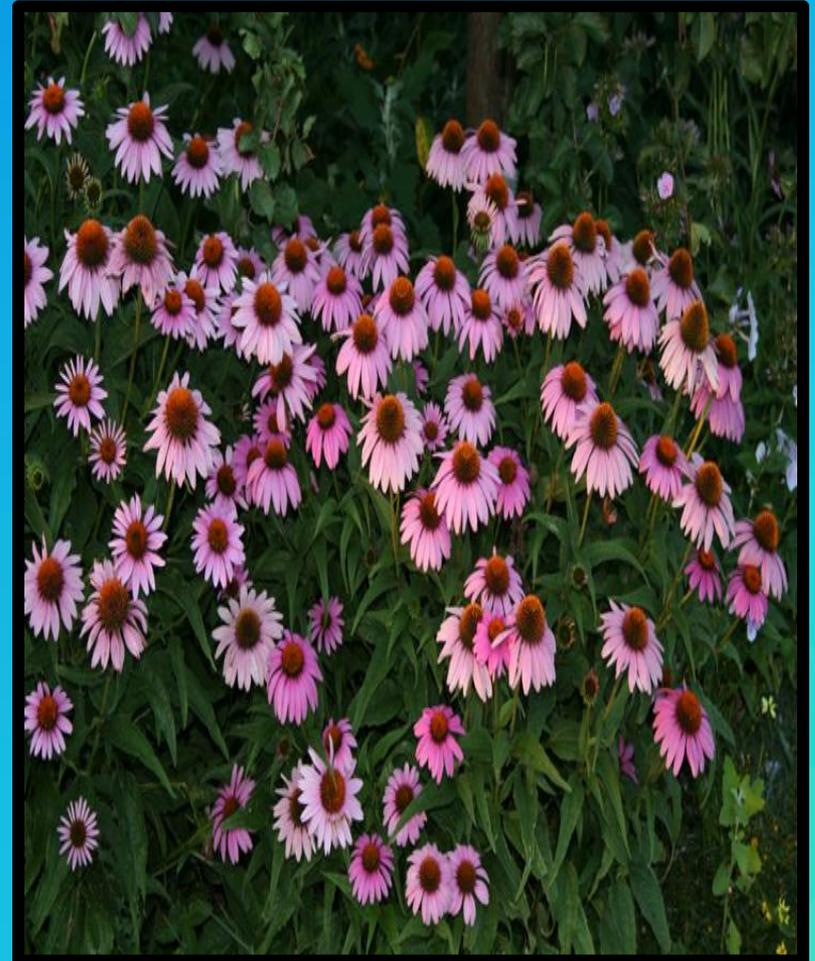


**GOLDEN ALEXANDER**

# Pictures of specific plants used in rain garden.



**SNEEZEWEED**



**PURPLE CONEFLOWER**

# Pictures of specific plants used in rain garden.



**BLUE WILD INDIGO**



**INDIAN GRASS**

# Plant Selection Process:

## **Factors you need to consider when making plant choices Include:**

- Research soil types at location – sand to clay, mixture?
- Light restraints of location – i.e. sun or shade all day, or combination of both.
- Colors and heights of flowering plants.
- Blooming times – you don't want everything blooming in one month and then nothing.

# PLANT SELECTION FOR 2011 RAIN GARDENS (RG)

## PERENNIALS

Page	Science Name	Common Name	Color	Bloom Time
114	Aster novae-angliae	New England Aster	Rose to purple	Aug. - Oct.
NA	Baptisia australis	False Indigo / Blue wild Indigo	Indigo	June - July
180	Eupatorium maculatum	Spotted Joe Pye	Lite pink to deep rose	July - Sept.
NA	Echinacea purpurea	Purple Coneflower	Purple	June - Oct.
198	Helenium autumnale	Sneezeweed	Yellow	Aug. - Nov.
208	Iris versicolor	Northern Iris	Lite to dark blue	May - July
222	Liatris pycnostachya	Prairie Blazingstar	Lilac to purple	July - Mid Sept.
266	Ratibida pinnata	Yellow Coneflower	Yellow	July - Oct.
268	Rudbeckia subtomentosa	Brown Eye Susan	Yellow + brown	July - Sept.
320	Tradescantia ohiensis	Ohio/Common Spiderwort	Red - blue	April - July
328	Vernonia fasciculata	Ironweed	Deep purple	July - Aug.
336	Zizia aurea	Golden Alexander	Bright yellow	May - July
NA	Parthenium integrifolium	Wild Quinine	White	July-Sept

## GRASSES / SEDGES / RUSHES

Page	Science Name	Common Name	Color	Bloom Time
308	Sorghastrum nutans	Switch grass	Golden Brown	July - Oct.
242	Panicum Virgatum	Indian Grass	Beige	Aug. - Sept.
156	Carex vulpinoidea	Fox Sedge	Green	May - June

**NOTE:** Page Numbers are from the Book: *PLANTS For Stormwater Design*

This is the listing of perennials and grasses and sedges that were used in the Airport RG.

# Rain Garden Specifics:

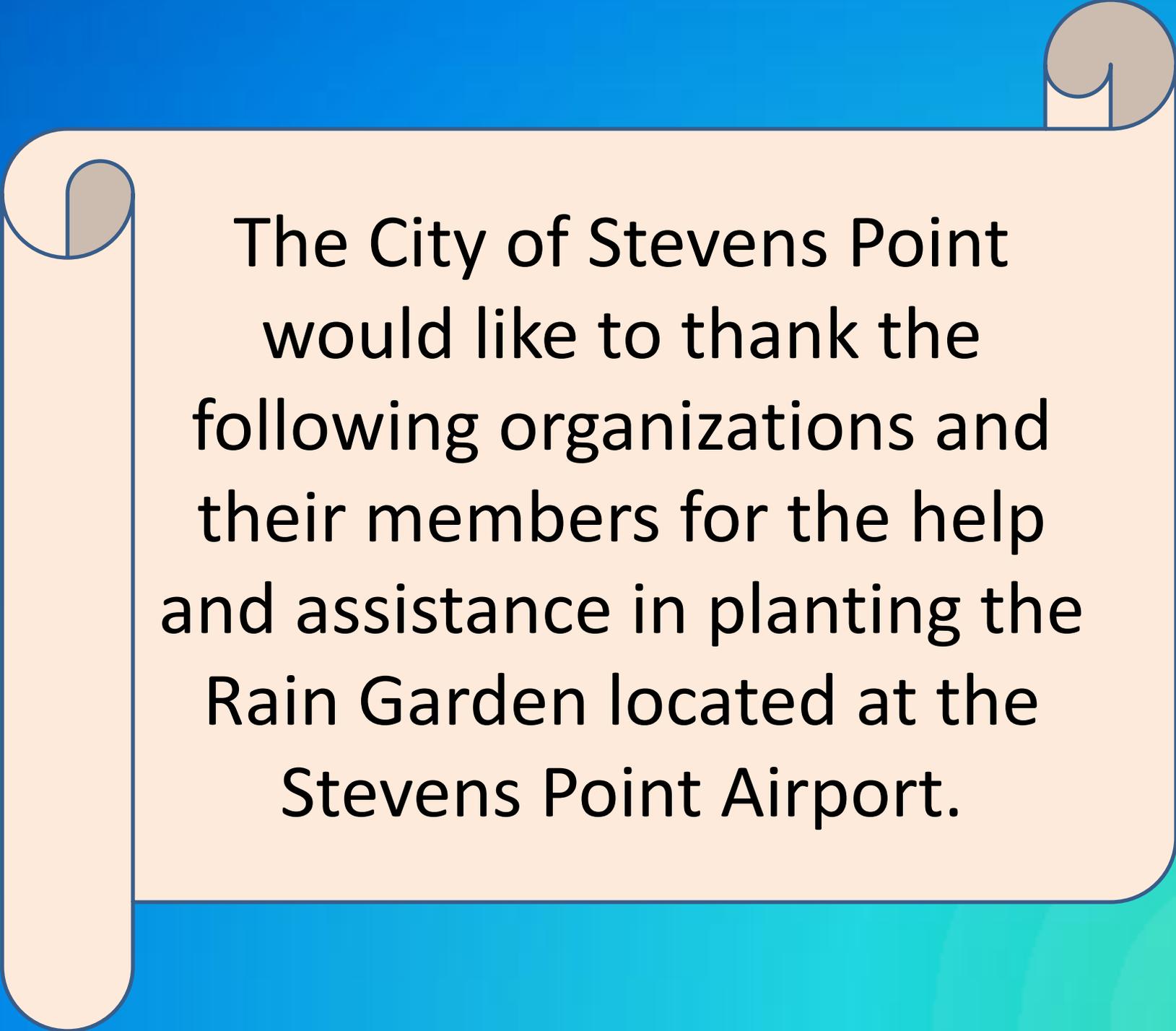
- Rain gardens are low maintenance, but not NO maintenance.
- You worked hard to create your rain garden, and to keep it working well for you and looking its best, some regular care is required.

# Rain Garden Benefits:

- Filter oil and grease from driveways, pesticides and fertilizers from lawns, and other pollutants before they reach the storm drain and eventually streams, wetlands, lakes and marine waters.
- Reduce flooding on neighboring property, overflow in sewers, and erosion in streams by absorbing water from impervious surfaces.
- Provide habitat for beneficial insects and birds.
- Increase the amount of water that soaks into the ground to recharge local groundwater.

# For more information go to:

- <http://dnr.wi.gov/runoff/rg/>
- <http://fyi.uwex.edu/rainbarrels/rain-gardens-2/rain-garden-workshop-may-22-at-100pm/>
- <http://learningstore.uwex.edu/Assets/pdfs/GWQ034.pdf>
- <http://basineducation.uwex.edu/centralwis/pdfs/rgmanual.pdf>
- OR - - Call your local WI DNR or UWEX office.



The City of Stevens Point  
would like to thank the  
following organizations and  
their members for the help  
and assistance in planting the  
Rain Garden located at the  
Stevens Point Airport.

Thanks to :

Portage County Master Gardener  
Association members for coming out  
to help plant the garden, specifically  
Shelly Binder  
and Ginny Carlton.

Information about the organization can be  
found on their Website:

<http://wimastergardener.org/?q=Portage>

Also, Thanks to :

Central Wisconsin Resiliency Project, an AmeriCorps Program and the Members that came to the airport and helped with planting the rain garden.

Their mission:

. . . . is to **identify and foster cooperative efforts** in Central Wisconsin aimed at creating an **environmentally, socially, and economically secure future.**

For more information on the Project check out their website at:  
<http://resiliencyproject.net/aboutus>

And Finally :

## The **NORTHCENTRAL WISCONSIN STORMWATER COALITION.**

The Coalition provided all the plants that were used in the Rain Garden. The Coalition is made up of the Cities of Marshfield, Merrill, Mosinee, Schofield, Stevens Point, Wausau, and Wisconsin Rapids; the Villages of Kronenwetter, Rothschild and Weston; the Town of Rib Mountain and Marathon County. The Coalition is working to address stormwater issues in North Central Wisconsin. For more information on the Coalition - check out their website at:

<http://basineducation.uwex.edu/centralwis/stormwater.htm>

Northcentral Wisconsin  
Stormwater Coalition



**Clean water  
starts with you!**

## Please note:

This is an advisory presentation. There are many ways of planting and designing a Rain Garden. There are also many factors that you must consider when deciding on how you will layout the plants and what plants you will want to use.

You can research your project, then let your imagination run. You can consider using trees, shrubs, perennials, and grasses or sedges. In this project we had Airport regulations to consider when we chose the types of plants used. You do not have to use the same plants as others – make your rain garden your own.

Thank you for watching this presentation – now go out and put in your own Rain Garden. Have Fun !

