AGENDA

6:30 pm    Welcome and Introduction
            Patrick Costello, Water Resources Analyst, City of Napa
            Frances Knapczyk, Napa County RCD

6:35 pm    Rainwater Harvesting
            Jesse Savou, BlueBarrel Rainwater Catchment Systems

7:30 pm    Local Case Studies
            Linda St. Claire
            Erevan O’Neill
            Pat and Dale Parker

7:45 pm    Rain Gardens
            Holly Johnson, GSM Landscape Architects

8:25 pm    Door Prizes

8:30 pm    Goodbye
Rainwater Harvesting

Jesse Savou, MS
BlueBarrel Rainwater Catchment Systems

[Separate Presentation Slides]

Jesse Savou, MS
BlueBarrel Rainwater Catchment Systems
Local Case Studies

Linda St. Claire
Erevan O’Neill
Pat and Dale Parker

Linda St. Claire
Erevan O’Neill
Rain Gardens

Holly Johnson
GSM Landscape Architects
Rain Gardens

Holly Johnson, PLA

What are they?

Why bother?

What can I do?
What are they?

- A planted depression that allows rainwater runoff from impervious areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed.

What are they?

Planted or not planted
What are they?

Why bother?

Undeveloped watershed

- Precipitation (100%)
- Evapotranspiration (40%)
- Runoff (10%)
- Infiltration (50%)
Why bother?

- Improves infiltration into groundwater

So?

- Reduces subsidence
Why bother?

- Increase groundwater recharge

DWR completed its evaluation and re-prioritization of all of the groundwater basins across California in 2019. The Napa Valley Subbasin was re-prioritized from a medium to a high priority ranking due primarily to revised projections of future population for the Subbasin, an increased assessment of the total number of wells, and a revised approach to evaluating water quality in the Subbasin. The change from a medium to a high priority does not affect current requirements for the Napa Valley Subbasin under SGMA. DWR has noted that the Napa Valley Subbasin is being managed sustainably and it is not in overdraft.
Why bother?

- Reduces water pollution:
  - oils, metals, sediment, bacteria, pesticides, herbicides, trash

Why bother?

- Reduces flooding
Any other reasons?

- Reduces need for irrigation
- Provides habitat for native species
- Beautifies your home

What can I do?

- Where water flows (from downspout or other surface)
- 10 feet from your foundation
- “Downhill” from your house, etc.
- Call 811 before you dig
Here is what I did

Here is what I did
Percolation Test

1. Dig a hole at least 1’ deep and 6” in diameter near or at the site you want to have your rain garden.

2. Fill the hole with water three times and allow it to thoroughly saturate the surrounding soil.

3. Fill the hole with water a fourth time and observe how long it takes the water to soak into the ground.

4. Check back in 12 hours. Check the depth of water remaining in the hole. If the water has mostly drained from the hole then the soil has an acceptable infiltration rate and you can assume the soil type is similar to sand. If water still remains in the hole consider assuming the soil type is clay. The water should drain at a rate of about 1 inch per hour for sandy soils.

Sub-base

- If you need to replace soil: 60% sand, 20% compost, 20% topsoil
- A dry well at the low point can help with drainage
- Hardwood mulch
Here is what I did

Here is what I did
Here is what I did
Choosing Plants

- Native
- Drought-tolerant
- Can take some inundation
- Edible

Choosing Plants

- Small Cape Rush, *Chondropetalum tectorum*
- Switch grass (*Panicum virgatum*)
Rain Garden at CRC
Plant list

- Calamagrostis x acutifolis ‘Karl Foerster’
- White Coneflower - Echinacea
- Yucca
- Strawberry Bush - Arbutus Marina - 24” box
- Purple coneflower - Echinacea
- Salvia clevelandii
- Salvia sylvestris
- Blanket flower - Gaillardia
- Butterfly bush - Buddleia davidii
- Santa Barbara daisy - Erigeron karvinskianus
- Yarrow ‘Paprika’ - Achillea millefolium
- Yarrow ‘Moonshine’
- Catmint - Nepeta ‘Walker’s Low’
- Rosemary ‘Tuscan Blue’
- Santolina virens
- Mimulus
- Elijah Blue Fescue
- Evening Primrose
- Twinberry
- Juncus
- Polygonum amphibium
A simpler, cheaper, and more sustainable way...

Slow it. Spread it. Sink it!

Rain Gardens
More Water-Wise Workshops

Wednesday, April 29
Smart Irrigation & Drip Systems

Wednesday, June 24
Greywater Systems

@ Napa Library Community Meeting Room

DOOR PRIZES

THANK YOU FOR COMING!