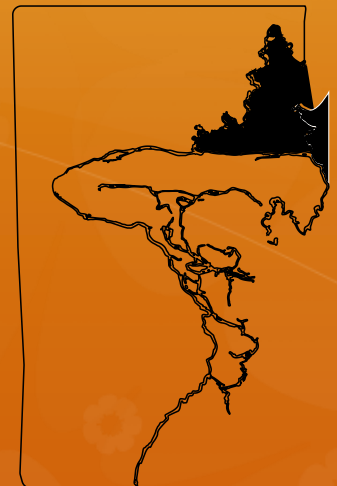


Permaculture & Food Forests

Julie Lamberts

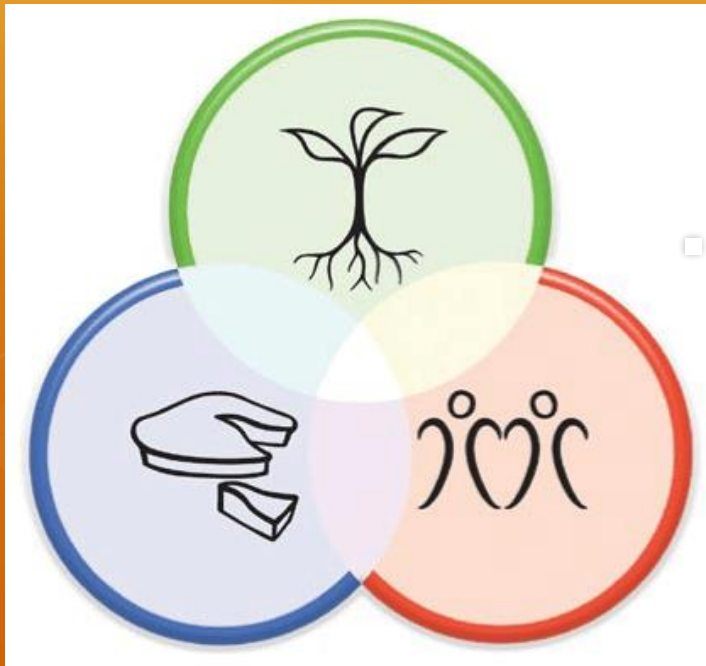
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- ▀ Eco-Plant Nursery
- ▀ Permaculture Design
- ▀ Consultation
- ▀ Permaculture Orchard



What is permaculture?

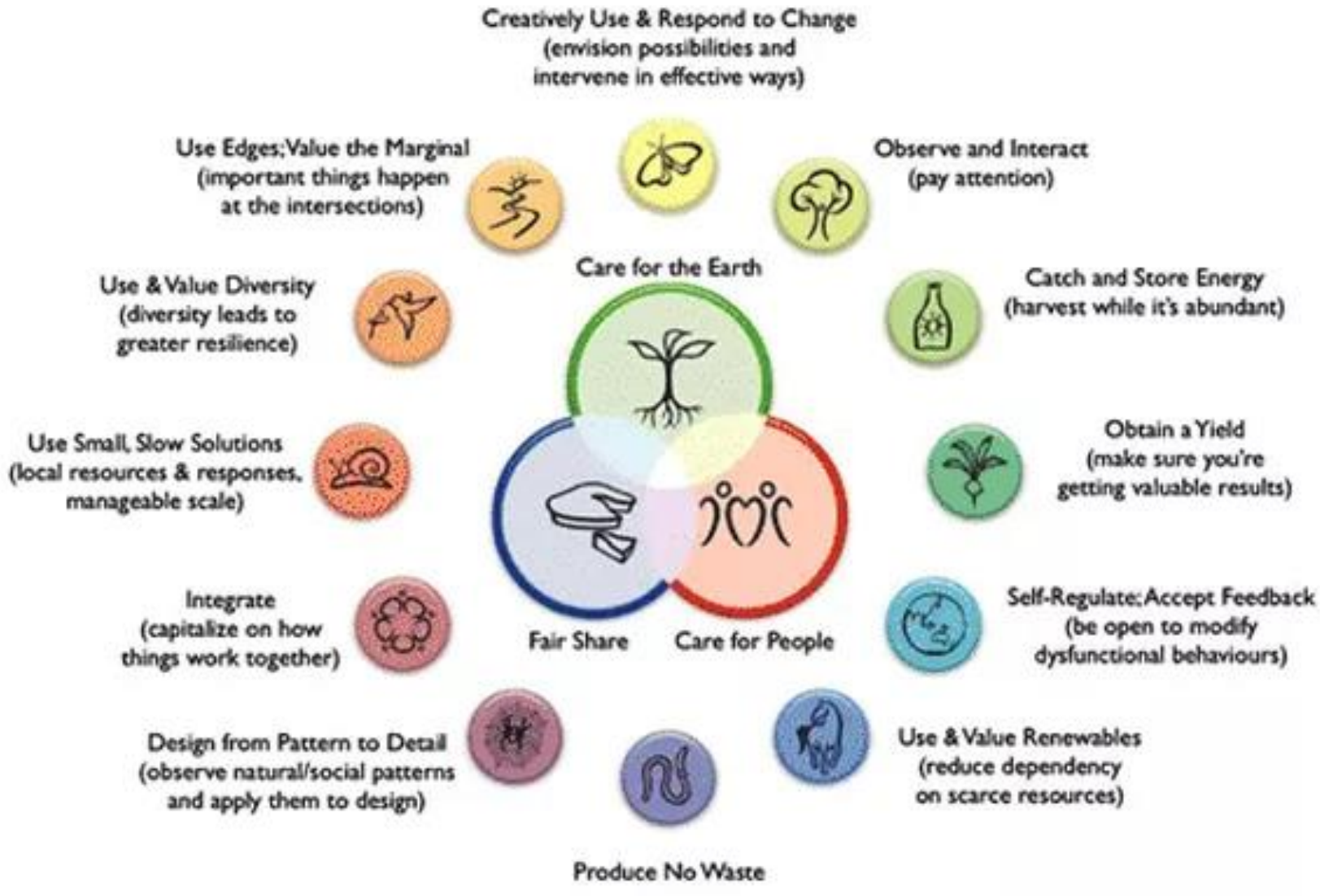
- A design process that is guided by ethics and design principles centered around whole systems thinking, copying nature
- It is the harmonious integration of landscape and people, providing their food, energy, shelter and other material and non-material needs in a sustainable way” Bill Mollison



Three ethics:
Care for the earth
Care for people
Fair share

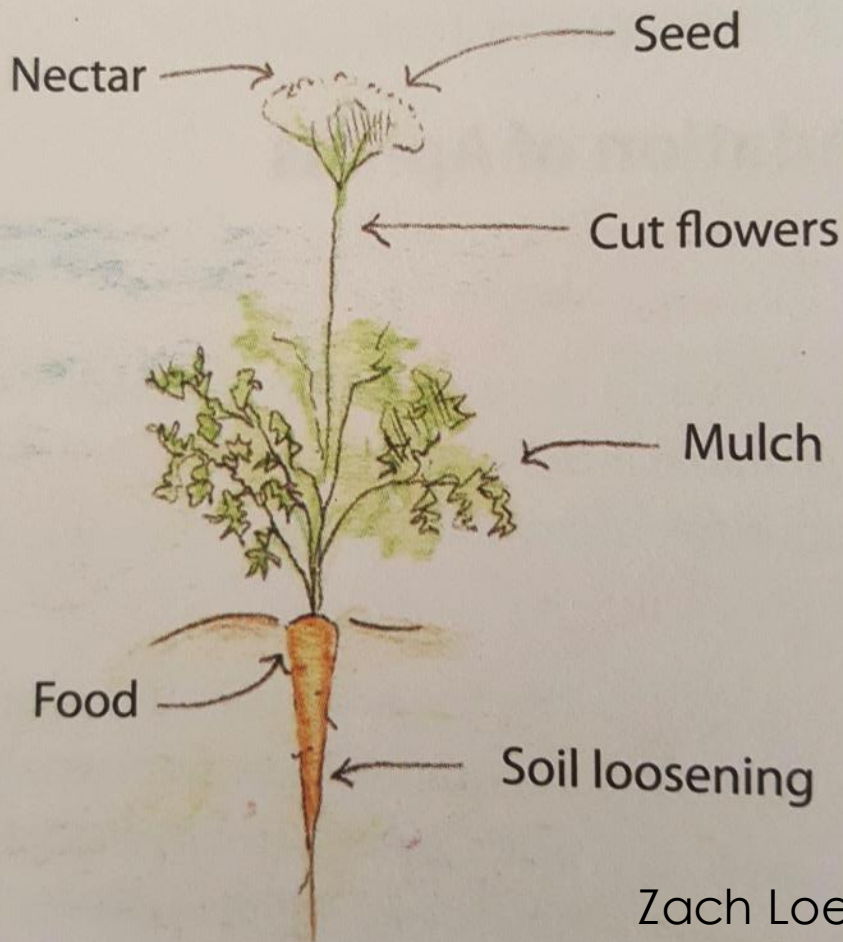


Principles



Multi-functional

The Permaculture Market Garden



Zach Loeks

- Permaculture is also about recognizing all the functions of each system and each component. E.g. Recognizing the value of each plant.



What is a Food Forest?



Definition (Dave Jacke and Eric Toensmeier):

- ❁ “Perennial polyculture of multipurpose plants”
- ❁ Each plant contributes to the success of the whole by fulfilling many functions
- ❁ The 7 F’s
- ❁ Mimic forest ecosystems

Forest Gardening

REGENERATION FOR THE FUTURE

A Garden that is...

Self-Perpetuating

Self-Fertilizing

Self-Watering

Self-Mulching

Self-Pollinating

Self-Healing

Self-Regulating for pests & disease

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Where to start?

- ❁ Observation, observation, observation!
- ❁ What grows well in your area, in your site specific environment?
- ❁ What spaces are available for planting?
- ❁ What is already existing?
- ❁ Permanent components – buildings, aisles, swales
- ❁ Sightlines – prioritize views
- ❁ Space plants based on their mature sizes! Unless you want to thin.

Permaculture Practices For Food Forests!

- Rainwater Harvesting/Swales
- Hugelkultures and Sheet Mulching
- Sheet mulching
- Tree guilds



Rainwater Harvesting



Waste products

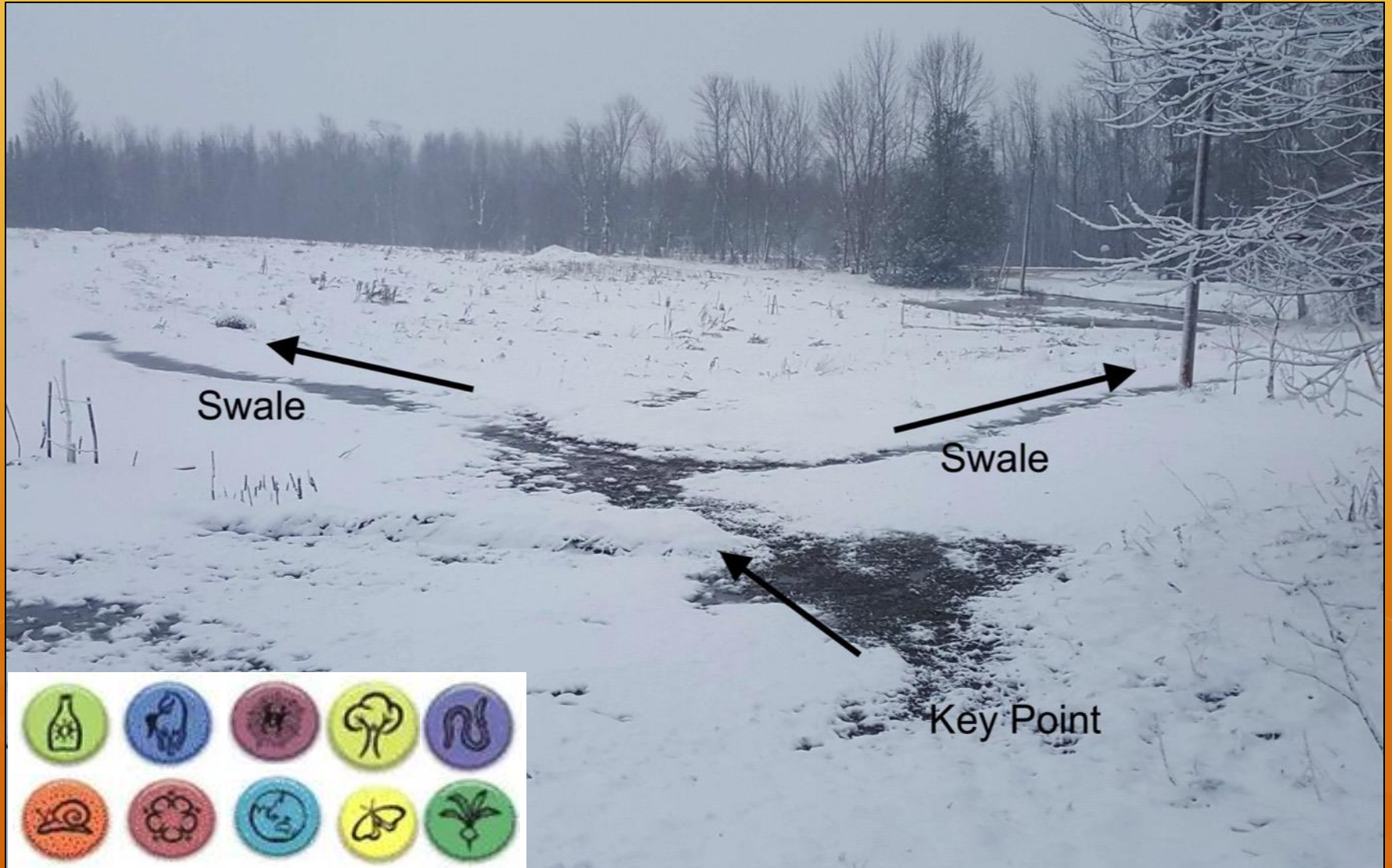


water storage

Collect and store
rainwater for use
during drought



Rainwater Harvesting - Swales



Hugelkulturs



Waste products → soil



Hugelkulturs



- **Multi-functional:** improve soil fertility by increasing organic material, improve water retention, warm the soil allowing you to start growing veggies earlier, create microclimates (e.g. north vs. south side)

Sheet Mulching/No Till

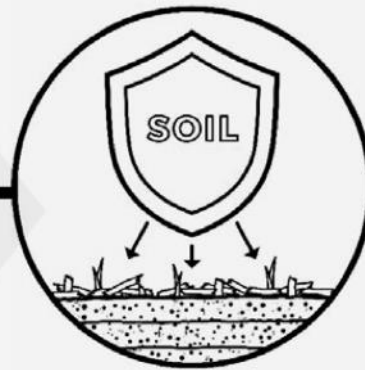
Waste products → soil

- Layering organic materials on the soil, replicating a forest, where organic material falls to the forest floor.



1
LESS DISTURBANCE

It's important to avoid plowing the soil, and abstain from using harmful chemical amendments. These practices make it difficult for a complex soil ecosystem to thrive.



2
SOIL ARMOR

Keeping the soil covered with living plants or trampled/dead plant material reduces erosion and helps lower soil temperatures.



3
INCREASED BIODIVERSITY

Growing a diversity of plants helps cultivate nutrient dense soil, increase soil carbon, and reduce the risk of pests and diseases.

Sheet Mulching/No Till/Living Plants

- Multi-functional – regulates soil temperature, weed barrier, provides nutrients, absorbs rainfall, reduces evaporation, increases organic matter, feeds the soil food-web, reduces erosion, sequesters carbon etc.





Diversity in our “Food Forest”



Diversity Brings Diversity



Benefits of Diversity

- Food-security
- Different plants provide different ecosystem services
- Diverse and healthy soil food web
- Resilience
- Let the plants do the work for you. Less labor.
- Ecosystem balance
- Beneficial insects, predatory insects - Pests don't get out of hand
- Etc.





Ecosystem Services



- Pest management
- Nutrient cycling
- Soil formation
- The 7 F's
- Carbon sequestration
- Temperature regulation
- Moisture retention
- Recreation
- Education

Ecosystem Services

Flowers:

- Edible, medicinal
- Pest deterrents
- Attract beneficial insects
- Insect & bird food, habitat, nesting material

Rhubarb leaves:

- Shade out grass
- Retain moisture
- Regulate soil temp
- Edible

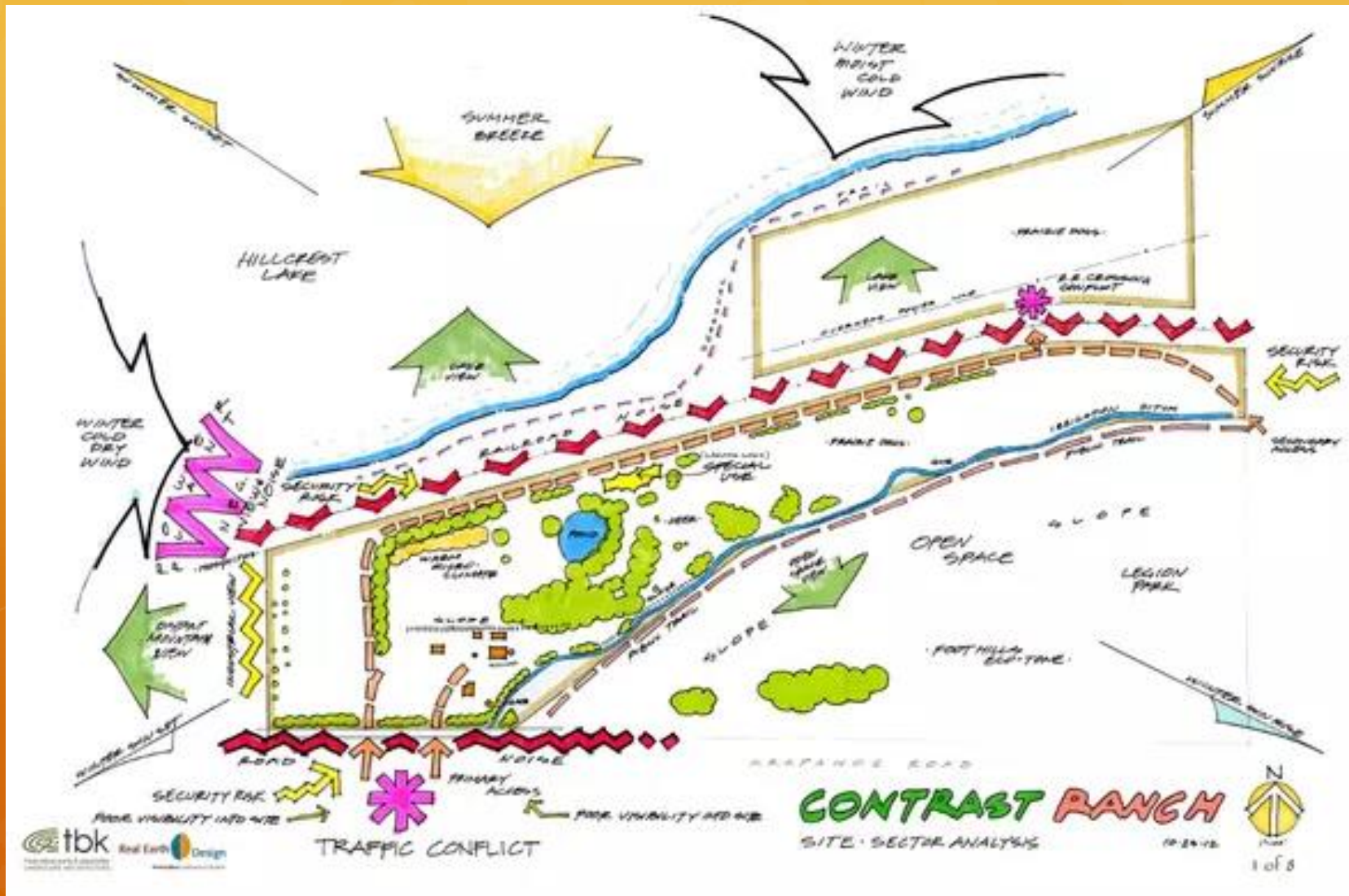
Sheet Mulch:

- Retain moisture
- Regulate soil temp
- Feed soil
- Weed barrier

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Connections, Relationships



Located in Lake Charles



I hope you are inspired!

- Plant native plants to feed the birds & insects. They need our help.
- Biodiversity is key!
- Each plant/garden element contributes to ecosystem functions and services.
- Use 'waste' products.
- Inspire others!



Resources

- ❁ Edible Forest Gardens – Dave Jacke and Eric Toensmeier – Volume 1 and 2
- ❁ Forest Gardening – Robert Hart
- ❁ Gaia's Garden – Toby Hemenway

Thank you!
Happy Planning!



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References

- ❁ Kiss the Ground's Purchasing Guide

