



## **Connecting Communities:**

Creating Low Impact Water Management Strategies, Connecting Animals, Plants and People

**Sisters of Social Service Holy Spirit Retreat Center  
4316 Lanai Road, Encino, California**

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Beginning Stormwater | Summer 2025| Rau**

# TABLE OF CONTENTS

CONNECTING COMMUNITIES



Mission Statement	3
Location Context	4
Site Conditions / Constraints / Opportunities	5
Site Plan	6-12
Active Water Systems	13
Passive Water Systems	14-16
Calculations	17-19
Sketches & Drawings	20
Plant Palette	21- 30
Added Plant Benefits	31
Birds & Animals That Benefit	32
How People Benefit	33
Acknowledgments	34



We are weaving together people, animals, and plants through a low-impact stormwater management system designed to work in harmony with nature. Our carefully curated, hyper-local plant palette—featuring riparian woodland, oak woodland, and aquatic habitats—creates critical lifelines for urban wildlife that depend on water for survival.

At the heart of this effort are frogs, whose populations have been deeply affected by urbanization. Because they require aquatic, riparian, and upland habitats—all of which we can restore on site—we have a rare opportunity to support their recovery. Frogs are more than just a species at risk; they are powerful indicators of ecosystem health. When the frogs return, we know the landscape is thriving. And perhaps most importantly, the sound of frogs singing becomes a living reminder of how people are deeply connected to the ecosystem around them.



The Holy Spirit Retreat Center traces its roots to the early 1930s, when it was founded by the Sisters of Social Service in Los Angeles' Mid-Wilshire district. In 1969, the center found its home in Encino, California, where it continues to flourish today.

Guided by the mission of the Sisters of Social Service, HSRC is a chartered ministry grounded in scripture and inspired by the spirit of St. Benedict. The Sisters have cultivated a place of prayer, hospitality, and welcome—an environment where community is nourished, individuals can grow in spirit, and interfaith dialogue is embraced.



## Current Site Conditions

- **Leaking Lake:** Water is seeping into lower elevations, requiring a sump pump to cycle it back—unfiltered—into the lake.
- **Potable Water Use:** The lake is being replenished with drinking water, an unsustainable practice.
- **Invasive Species Pressure:** Non-native plants such as Mexican fan palm (*Washingtonia robusta*), English ivy (*Hedera helix*), periwinkle (*Vinca minor*), pampas grass (*Cortaderia selloana*), and panic veldtgrass (*Ehrharta erecta*) are degrading ecological health.
- **Stormwater Mismanagement:** With little to no stormwater infrastructure, runoff flows off-site instead of being absorbed.
- **Erosion:** Slopes are actively eroding, further destabilizing the landscape.

## Constraints

1. A leaking, inefficient lake system.
2. Aggressive invasive plant populations.
3. Severe erosion compounded by the absence of stormwater management.

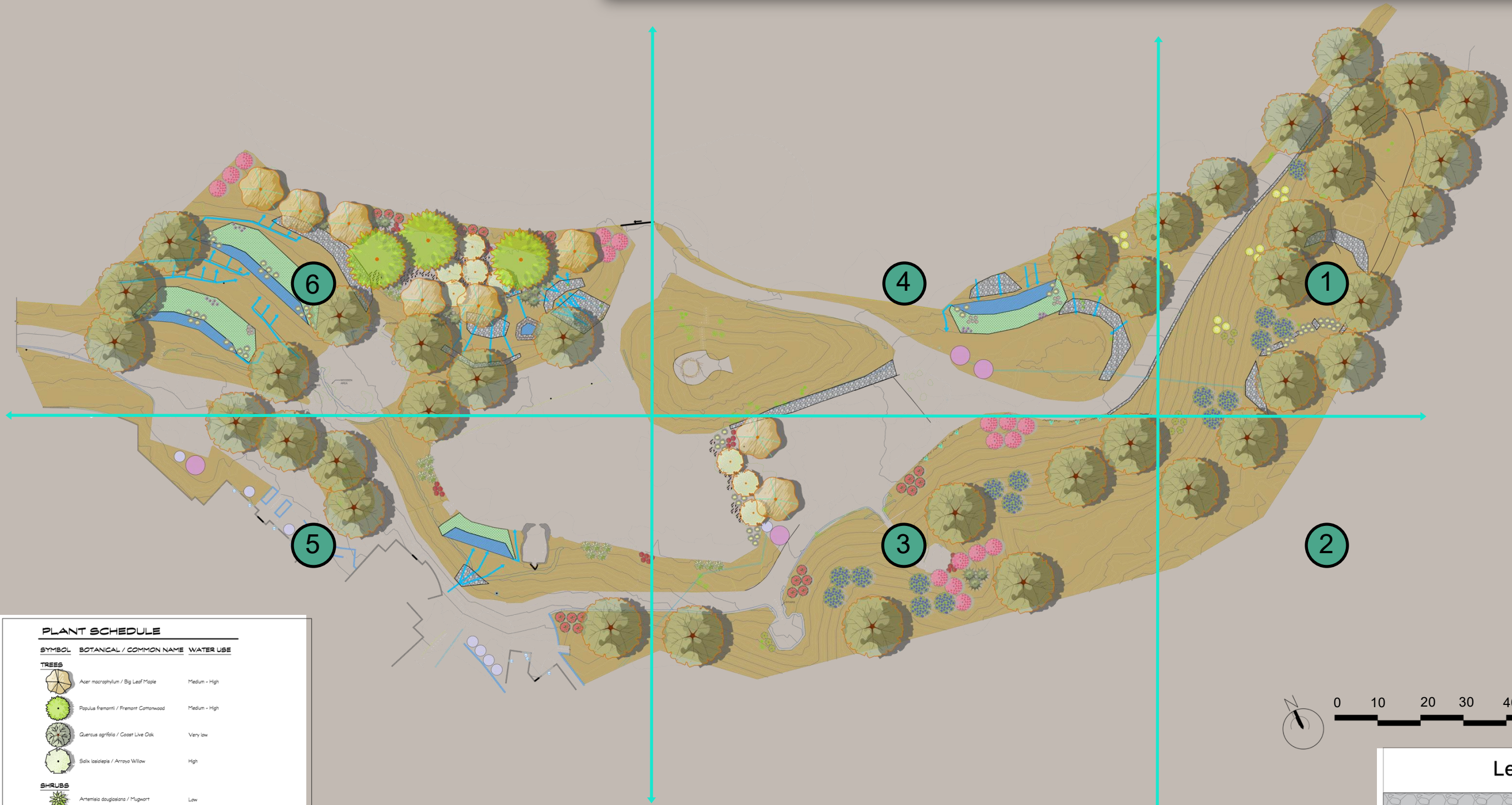
## Opportunities

1. **Reimagine Water Use:** Redirect and repurpose water to sustain vibrant riparian habitats.
2. **Restore Ecology:** Replace invasive species with locally native plants that support wildlife, while repurposing invasive biomass into hügelkultur berms that build soil health.
3. **Harness Stormwater:** Develop a low-impact stormwater system designed to slow it, spread it, and sink it—turning runoff into a resource.

# SITE PLAN

Site Plan Key

CONNECTING COMMUNITIES



Legend	
	Rock Works
	Basin
	Berm
	Organic Mulch With Plantings
	5000 G Tank
	1000 G Tank
	Spreader Swale
	Flow Arrow

PLANT SCHEDULE		
SYMBOL	BOTANICAL / COMMON NAME	WATER USE
<b>TREES</b>		
	<i>Acer macrophyllum</i> / Big Leaf Maple	Medium - High
	<i>Populus fremontii</i> / Fremont Cottonwood	Medium - High
	<i>Quercus agrifolia</i> / Coast Live Oak	Very low
	<i>Salix lasiolepis</i> / Arroyo Willow	High
<b>SHRUBS</b>		
	<i>Artemisia douglasiana</i> / Mugwort	Low
	<i>Baccharis salicifolia</i> / Mulefat	Medium - High
	<i>Bouteloua gracilis</i> / Blue Grama Grass	Low
	<i>Carex proterocarpa</i> / California Field Sedge	Medium
	<i>Ceanothus albertus</i> / Hairy Ceanothus	Low
	<i>Diplazium aurantiacum</i> / Sticky Monkeyflower	Very low
	<i>Eleocharis macrostachya</i> / Common Spikerush	High
	<i>Erythronium cardinale</i> / Scarlet Monkeyflower	Medium - High
	<i>Ribes aureum</i> / Golden Currant	Very low - Medium
	<i>Rosa californica</i> / California Wild Rose	Low
	<i>Ribus ursinus</i> / California Blackberry	Low - Medium
	<i>Stipa pulchra</i> / Purple Needle Grass	Low
	<i>Vitis californica</i> / Desert Wild Grape	Low - Medium

# SITE PLAN

Section 1

Enlargement

CONNECTING COMMUNITIES

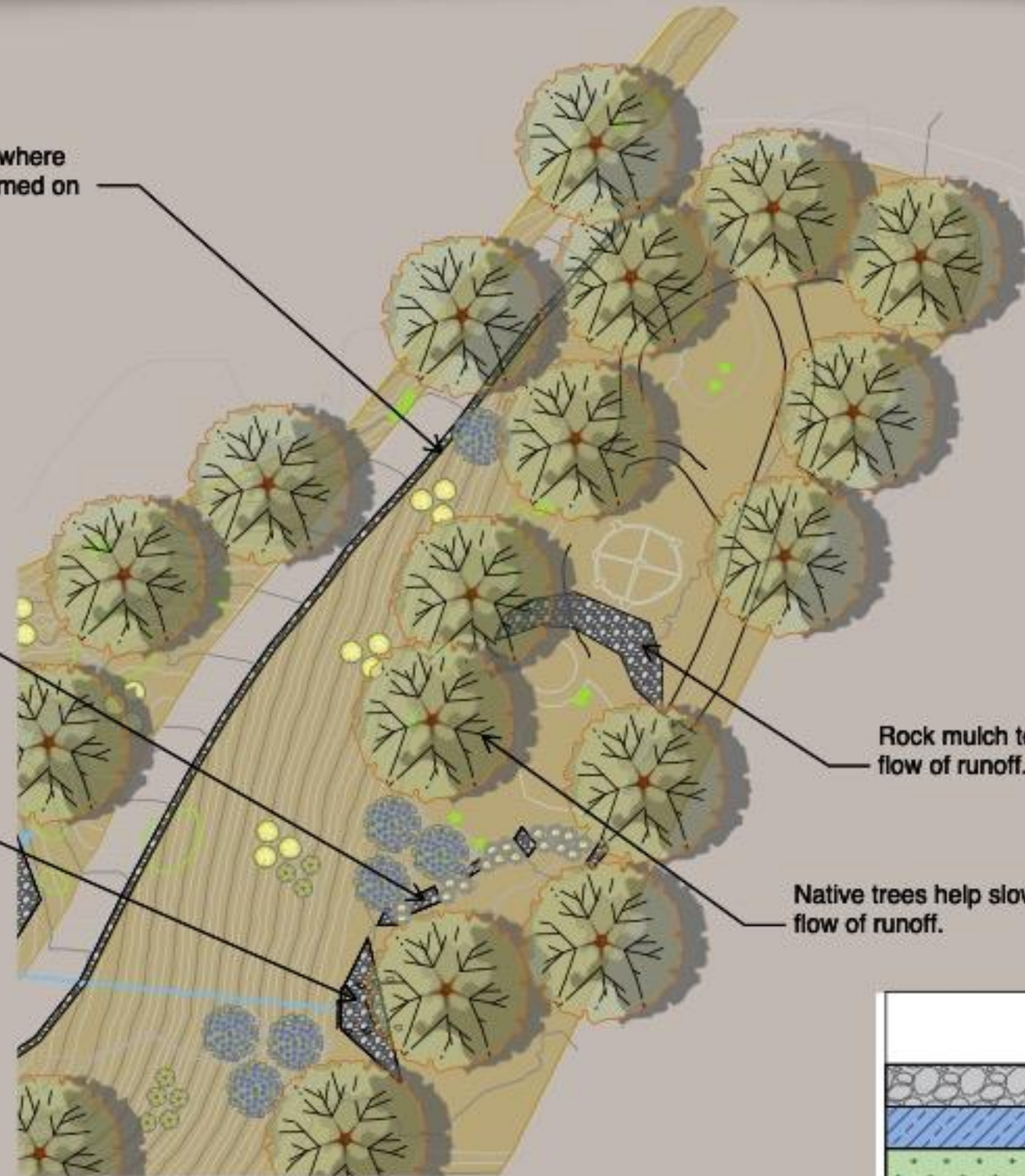
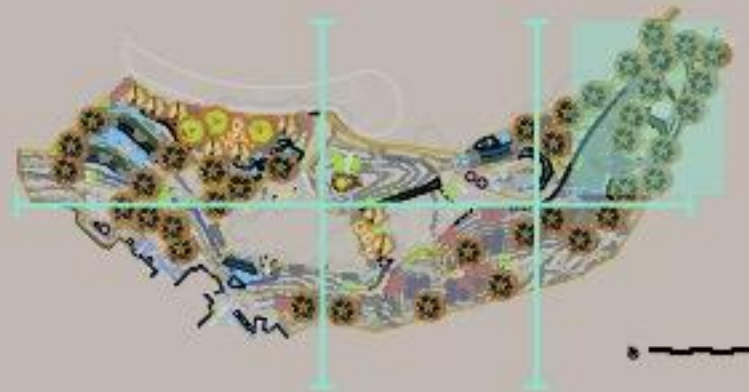
Gravel mulch where rutting has formed on roadside.

One Rock Dams and Carex to heal rutting and help spread the flow.

Rock mulch slows flow of runoff as it enters pipe.

Rock mulch to slow flow of runoff.

Native trees help slow flow of runoff.



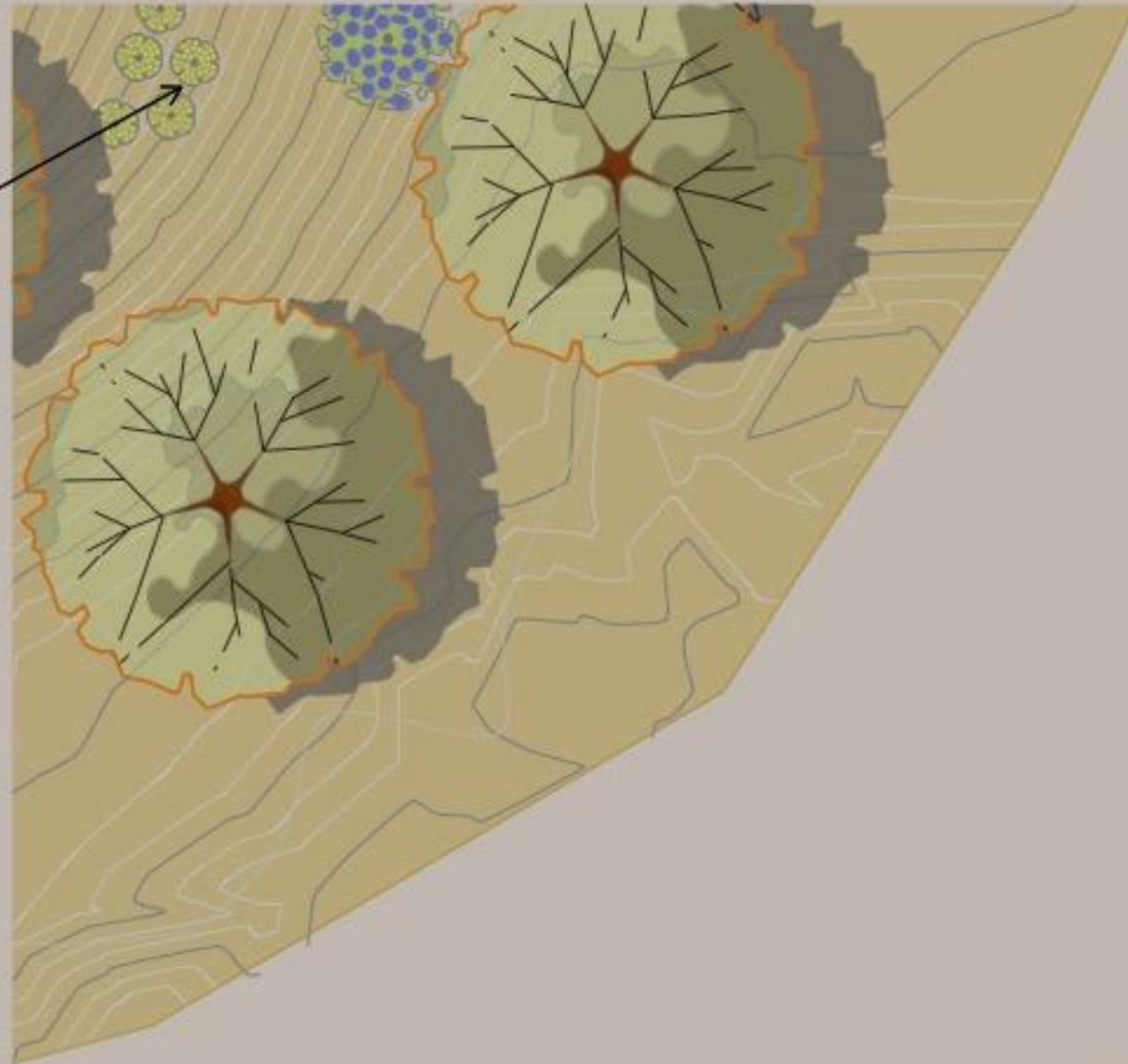
Legend	
	Rock Works
	Basin
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	5000 G Tank
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	Spreader Swale
	Flow Arrow

NTS

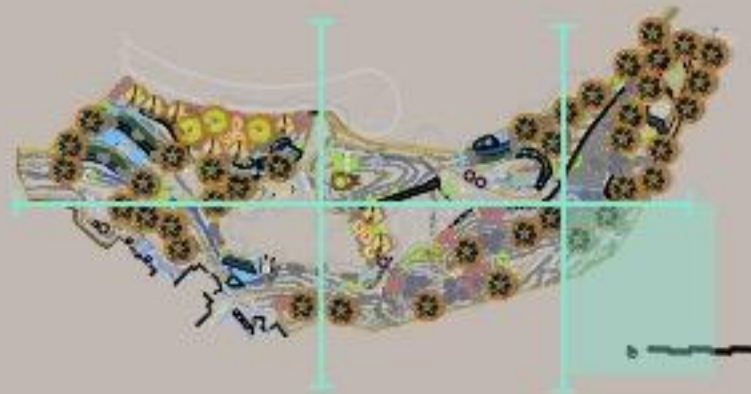
# SITE PLAN

Section 2

Enlargement



Native plantings help filter and slow the flow.



Legend	
	Rock Works
	Basin
	Berm
	Organic Mulch With Plantings
	5000 G Tank
	1000 G Tank
	Spreader Swale
	Flow Arrow

NTS

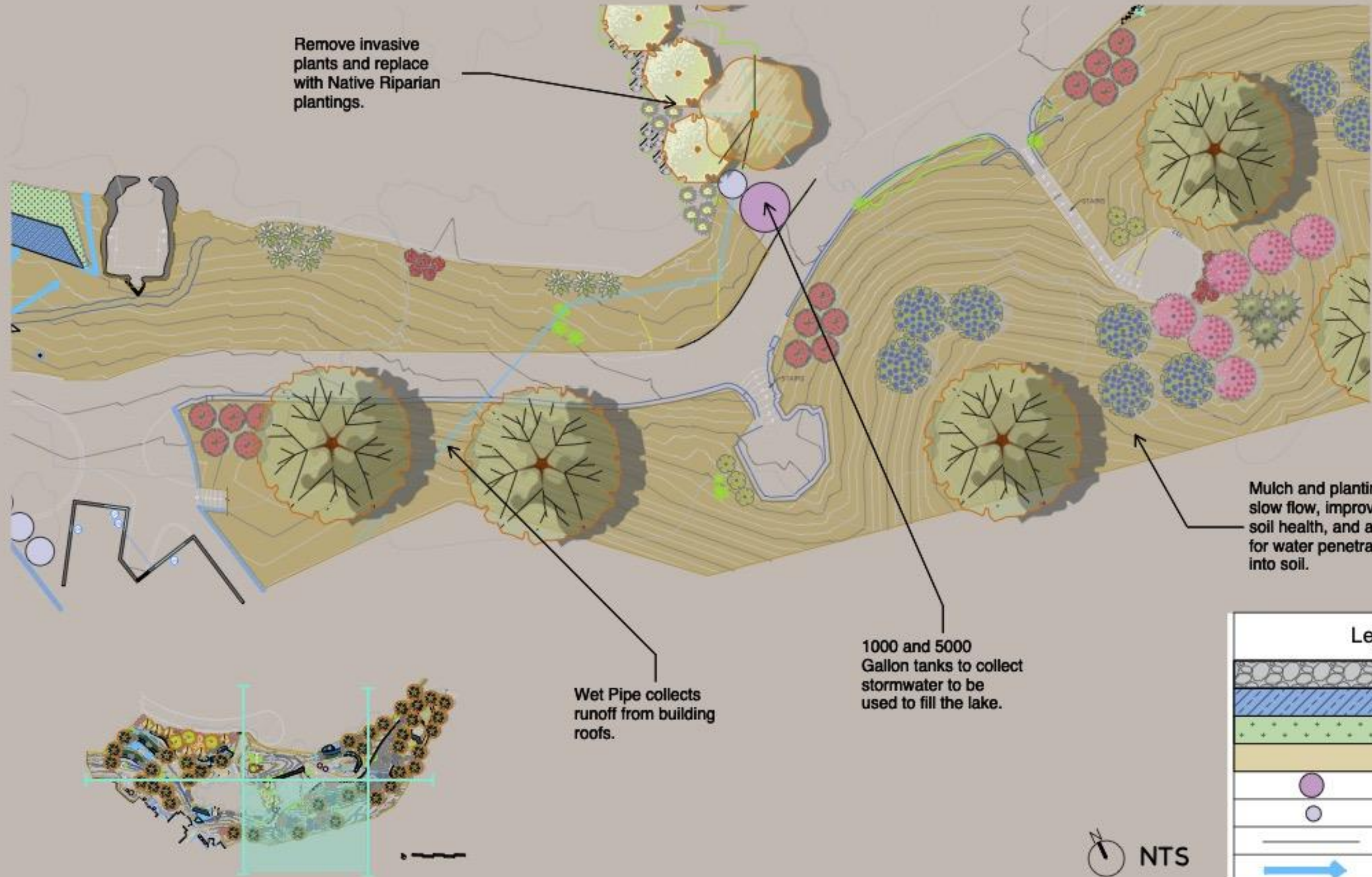
CONNECTING COMMUNITIES

# SITE PLAN

Section 3

Enlargement

CONNECTING COMMUNITIES



Remove invasive plants and replace with Native Riparian plantings.

Mulch and plantings slow flow, improve soil health, and allow for water penetration into soil.

1000 and 5000 Gallon tanks to collect stormwater to be used to fill the lake.

Wet Pipe collects runoff from building roofs.

Legend	
	Rock Works
	Basin
	Berm
	Organic Mulch With Plantings
	5000 G Tank
	1000 G Tank
	Spreader Swale
	Flow Arrow

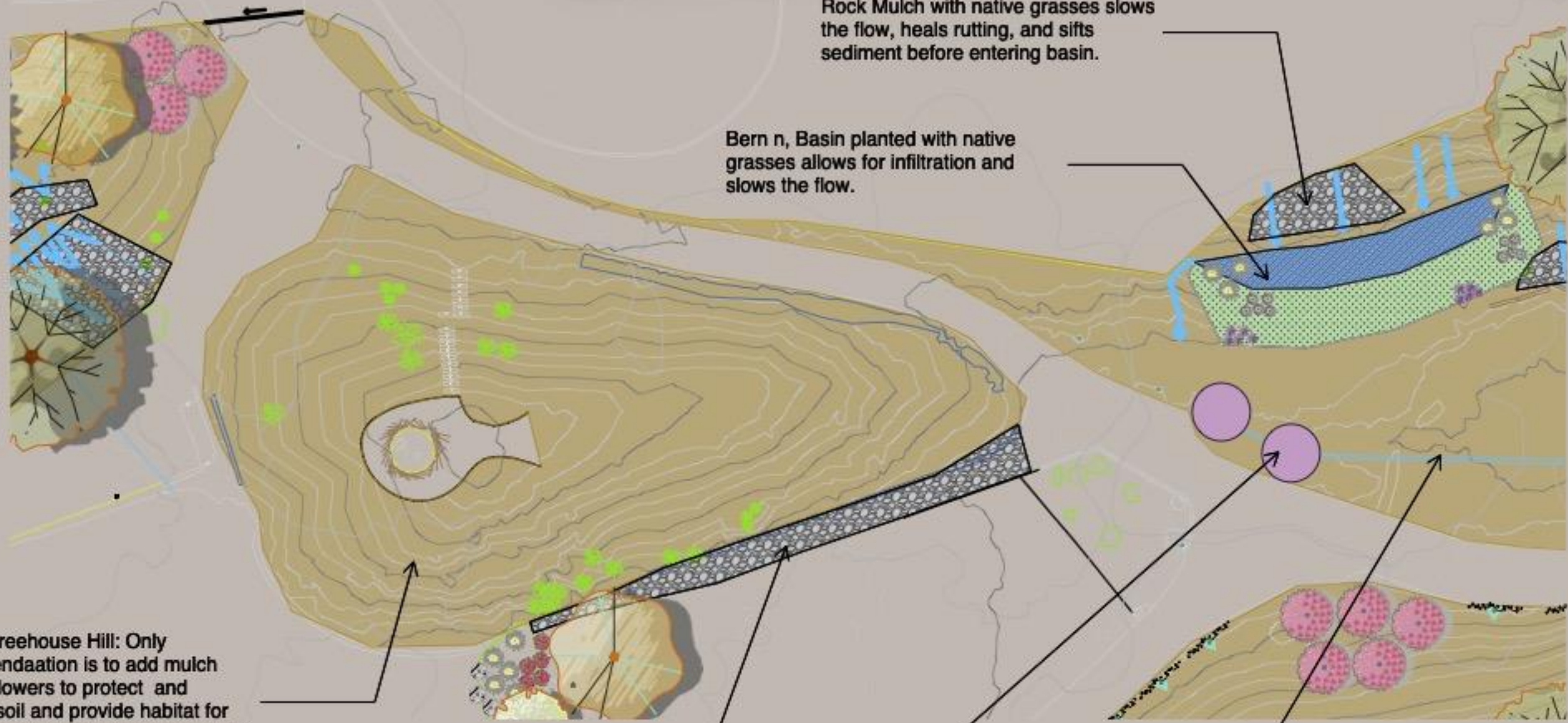
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# SITE PLAN

## Enlargement

## Section 4

# CONNECTING COMMUNITIES



Rock Mulch with native grasses slows the flow, heals rutting, and sifts sediment before entering basin.

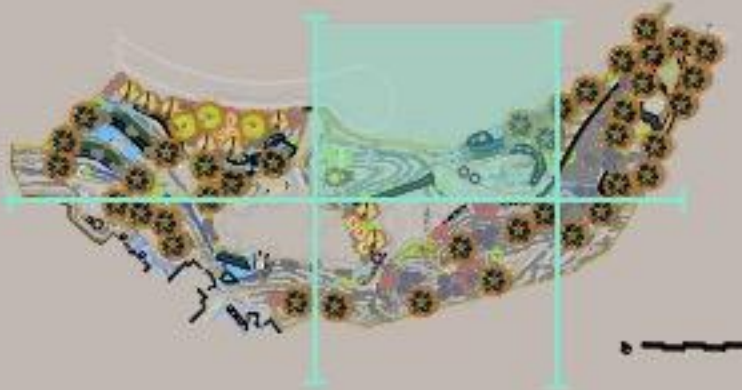
Berm n, Basin planted with native grasses allows for infiltration and slows the flow.

Biofillic Treehouse Hill: Only recommendaation is to add mulch and wildflowers to protect and improve soil and provide habitat for wildlife as existing native plantings fill in.

5000 Gallon tanks to collect stormwater to be used to fill the lake.

Wet Pipe from upper area.

Break up cement swale and plant with native grasses.



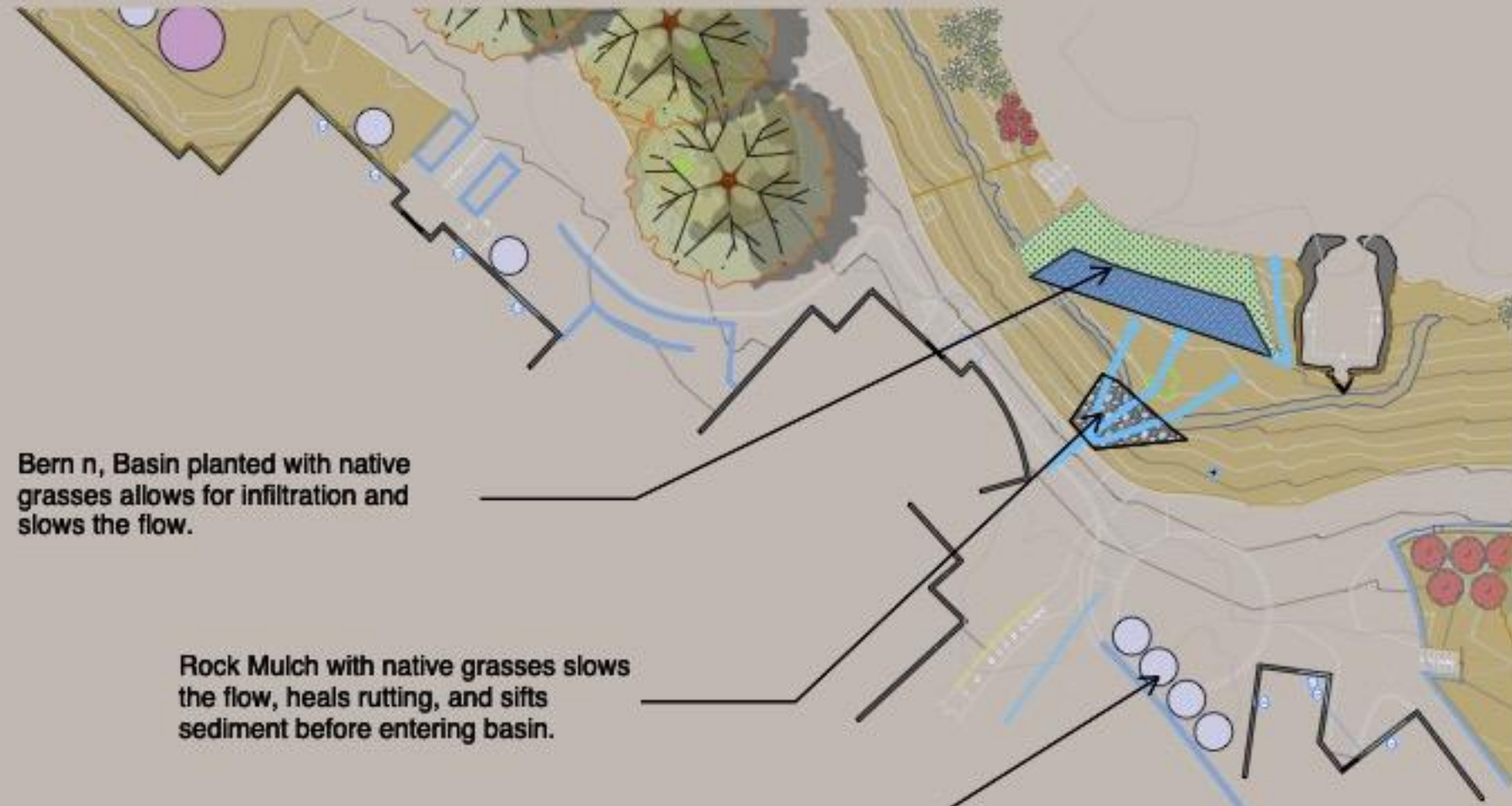
Legend	
	Rock Works
	Basin
	Berm
	Organic Mulch With Plantings
	5000 G Tank
	1000 G Tank
	Spreader Swale
	Flow Arrow



# SITE PLAN

Section 5

Enlargement

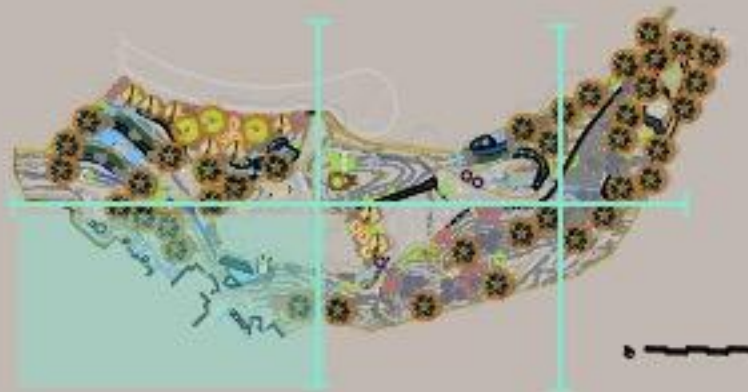


Berm n, Basin planted with native grasses allows for infiltration and slows the flow.

Rock Mulch with native grasses slows the flow, heals rutting, and sifts sediment before entering basin.

5000 Gallon tanks to collect stormwater to be used to fill the lake.

CONNECTING COMMUNITIES



Legend	
	Rock Works
	Basin
	Berm
	Organic Mulch With Plantings
	5000 G Tank
	1000 G Tank
	Spreader Swale
	Flow Arrow

NTS

# SITE PLAN

## Enlargement

## Section 6

## CONNECTING COMMUNITIES

Media Luna Collector directs runoff into low point.

Berm n, Basin planted with native grasses allows for infiltration and slows the flow.

Spreader Swales direct runoff into Berm N' Basins.

"Swamp": Remove invasive plants and replace with Native Riparian plants.

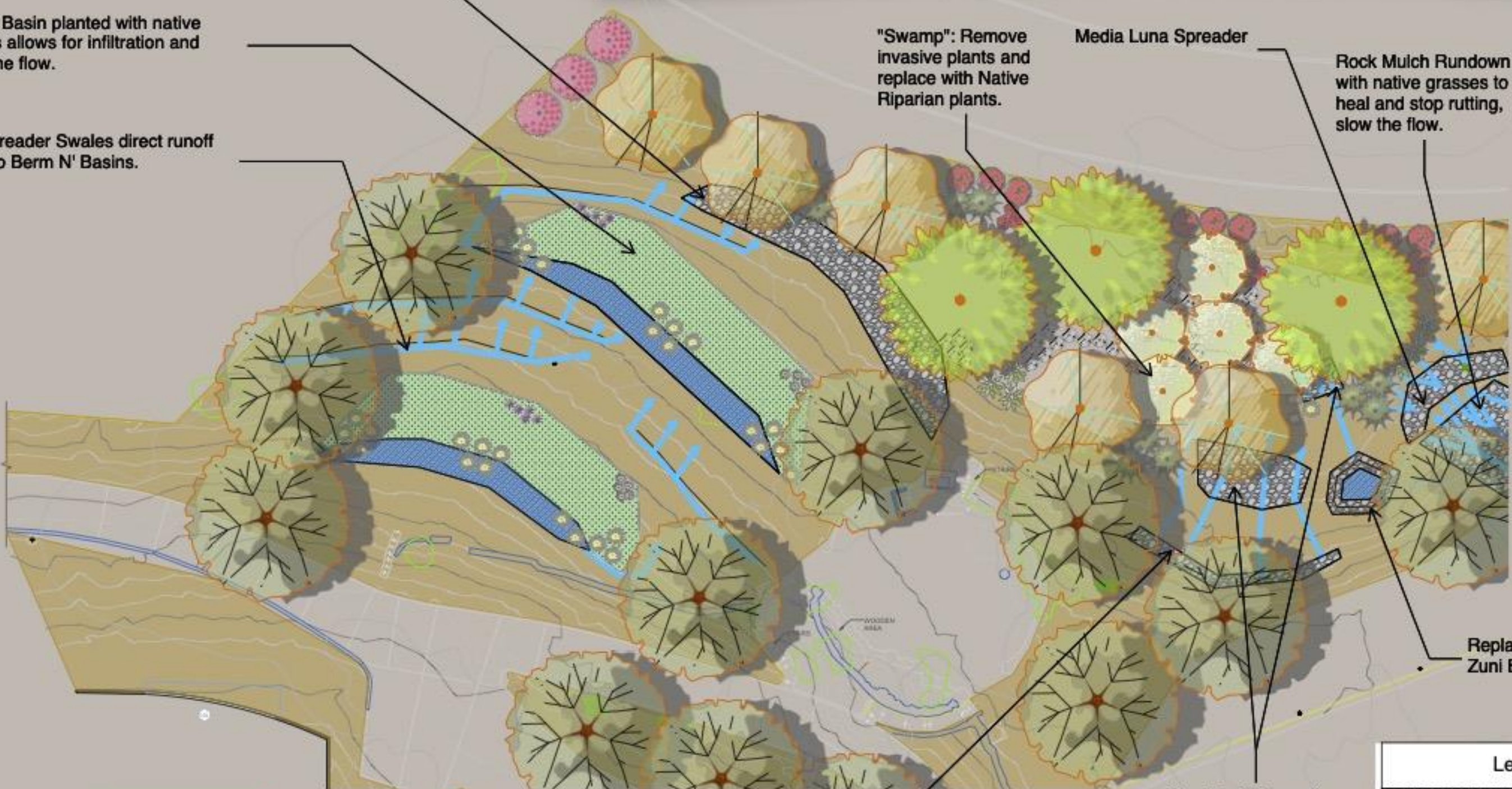
Media Luna Spreader

Rock Mulch Rundown with native grasses to heal and stop rutting, slow the flow.

Replace sump with Zuni Bowl

One Rock Dam with Native grasses.

Media Luna spreader.

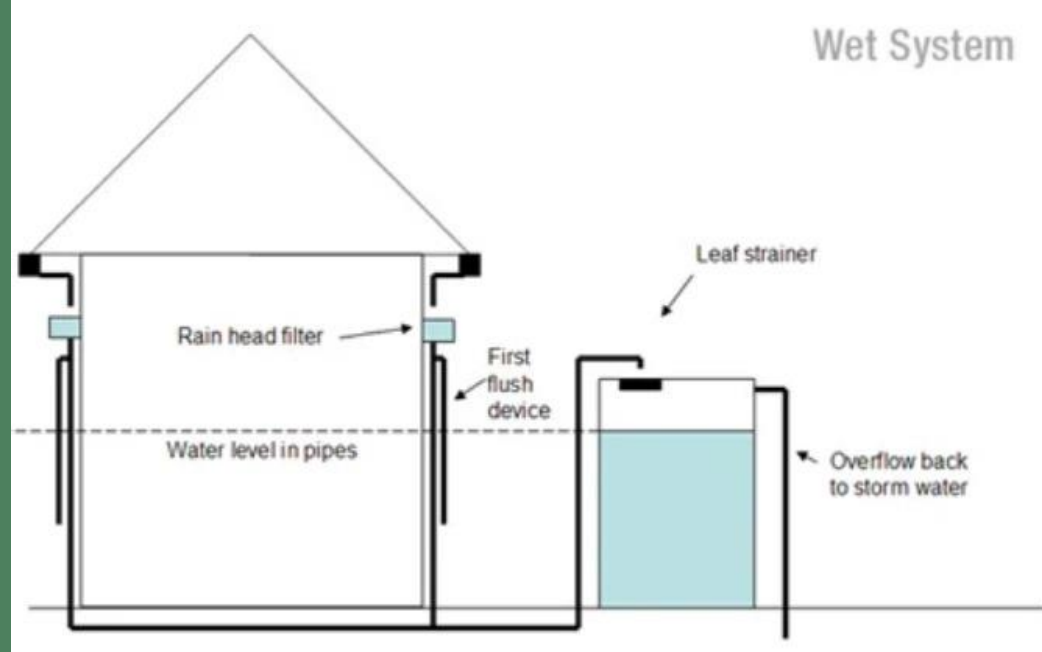


Legend	
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	Flow Arrow

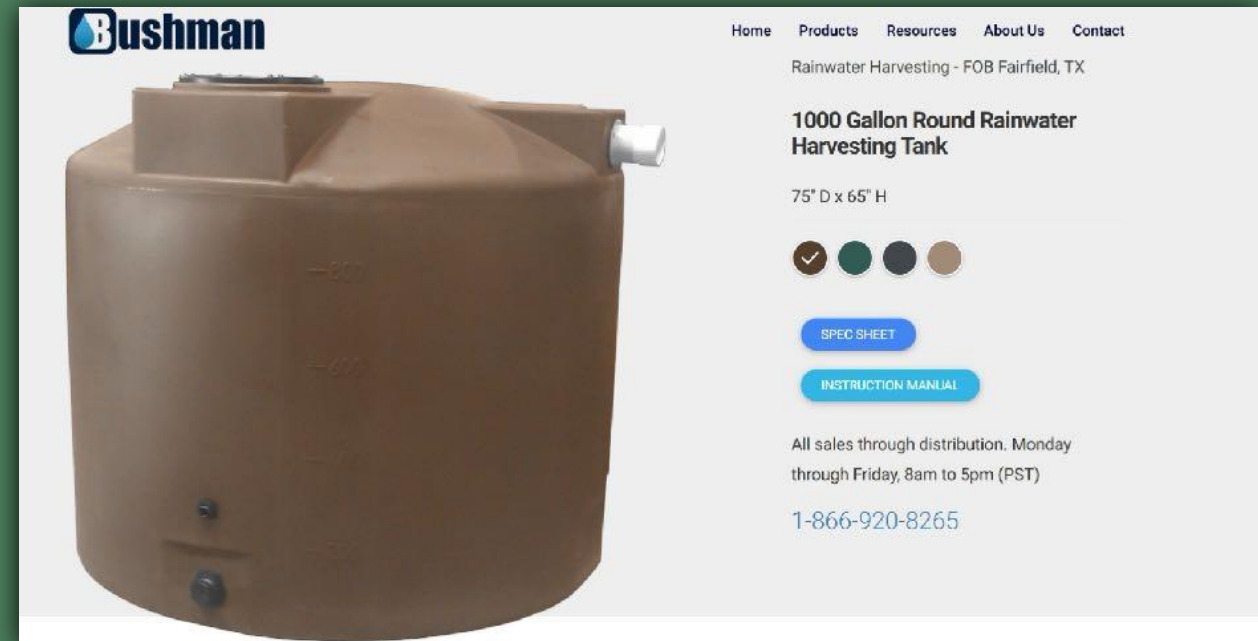
# ACTIVE WATER SYSTEMS

Tanks selected for site use

Collection sites above tanks. Water flow via gravity



Water flow from collection site to tanks



1000 gallon tanks



5000 gallon tanks

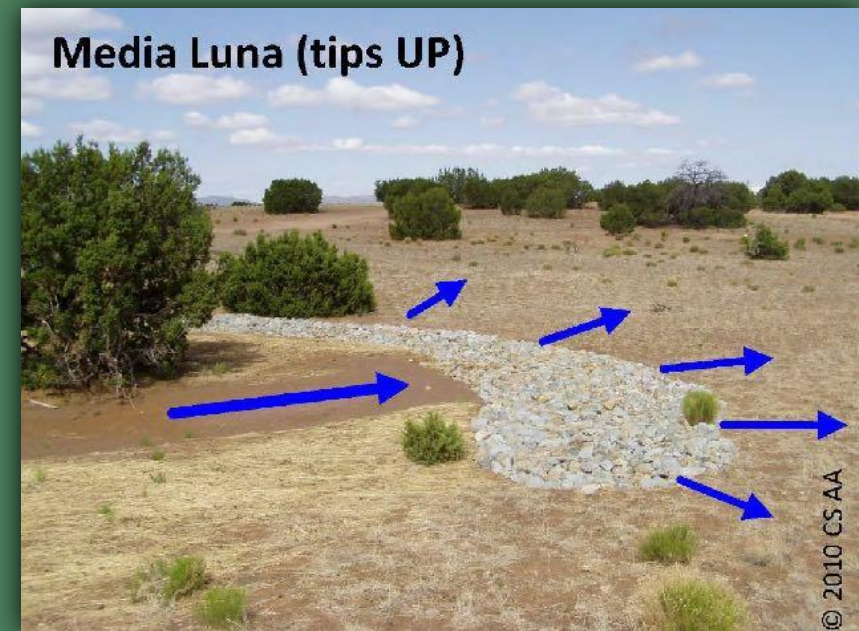
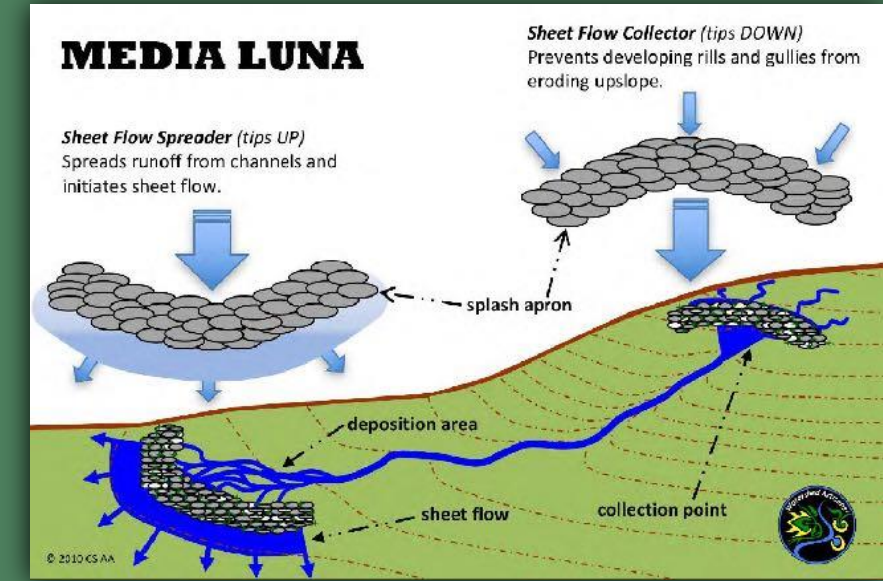
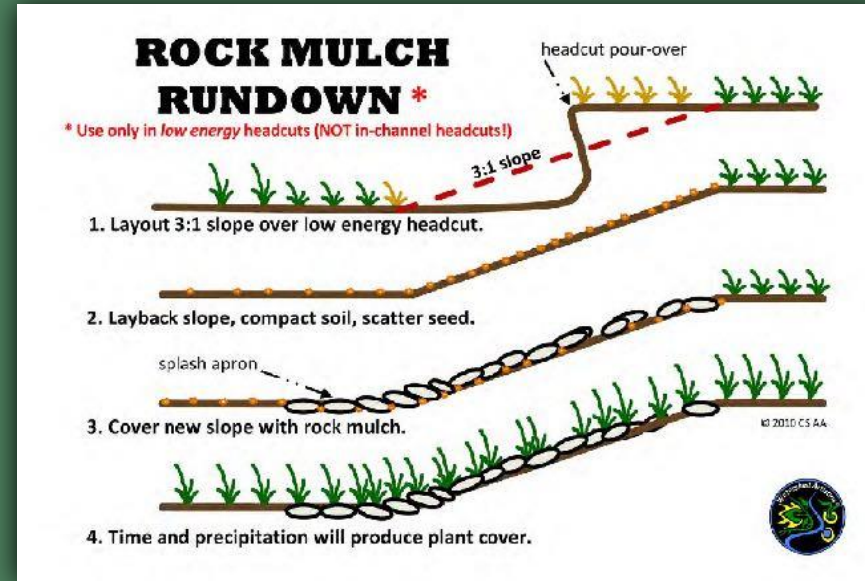
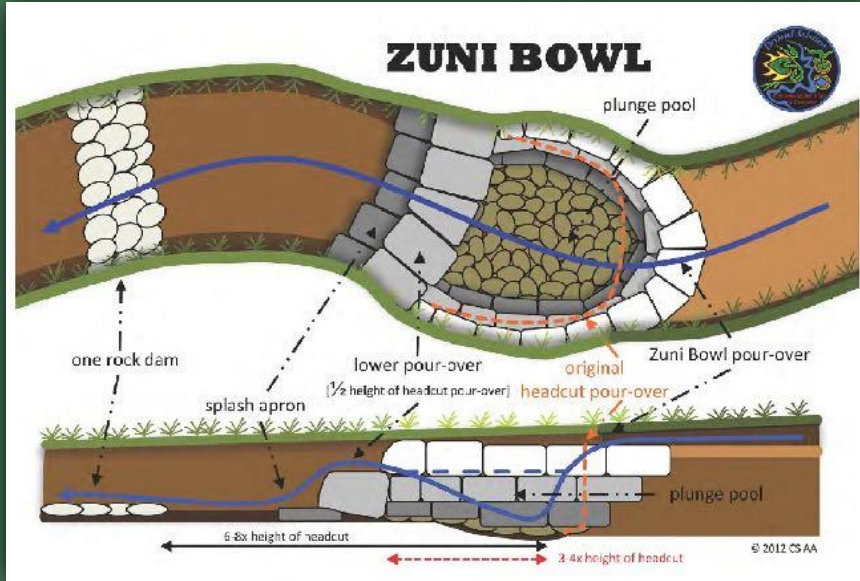
CONNECTING COMMUNITIES

# PASSIVE WATER SYSTEMS

Strategies for keeping water on site

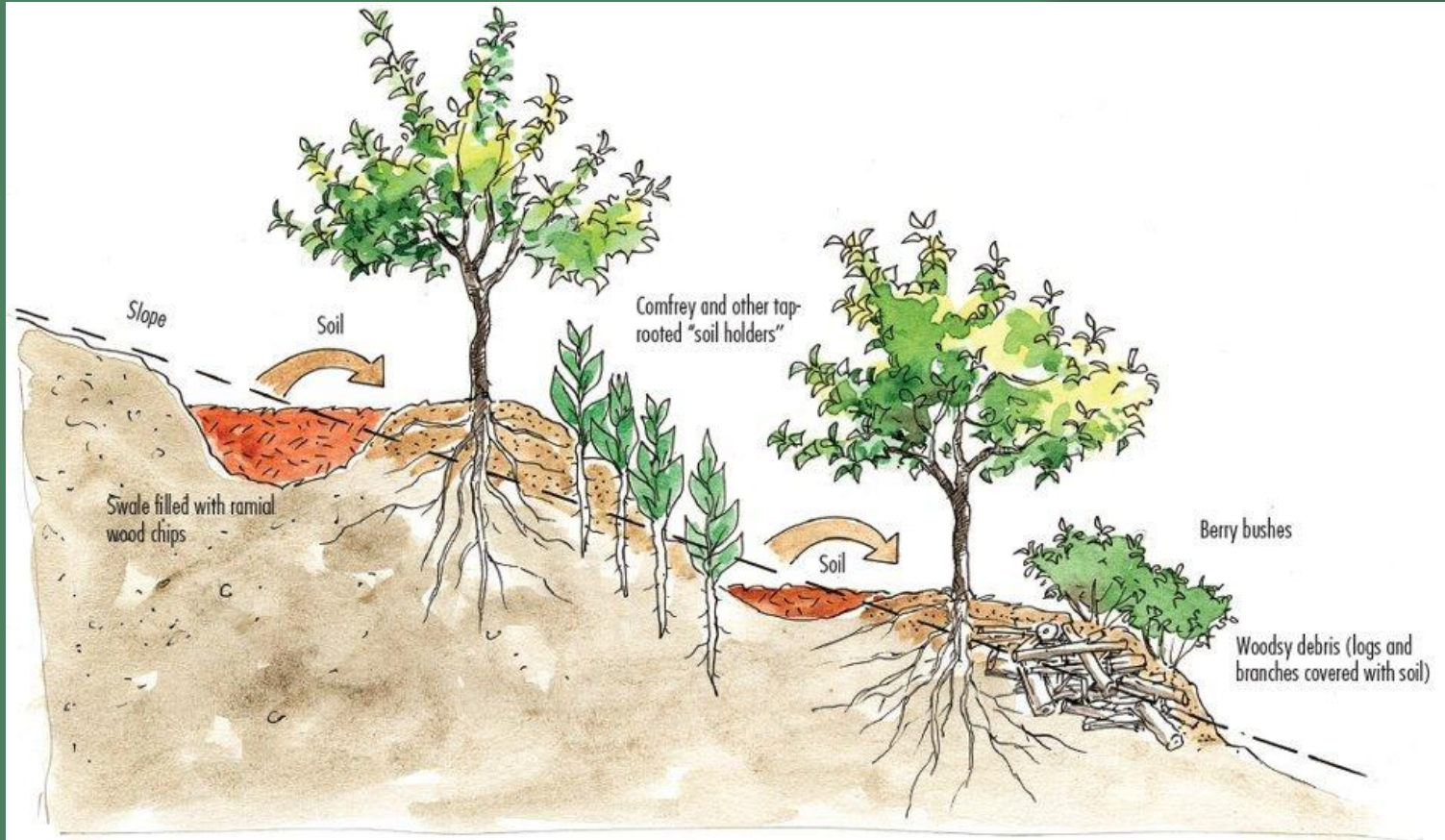
Slow It, Spread It, Sink It - Turning runoff into a resource

CONNECTING COMMUNITIES

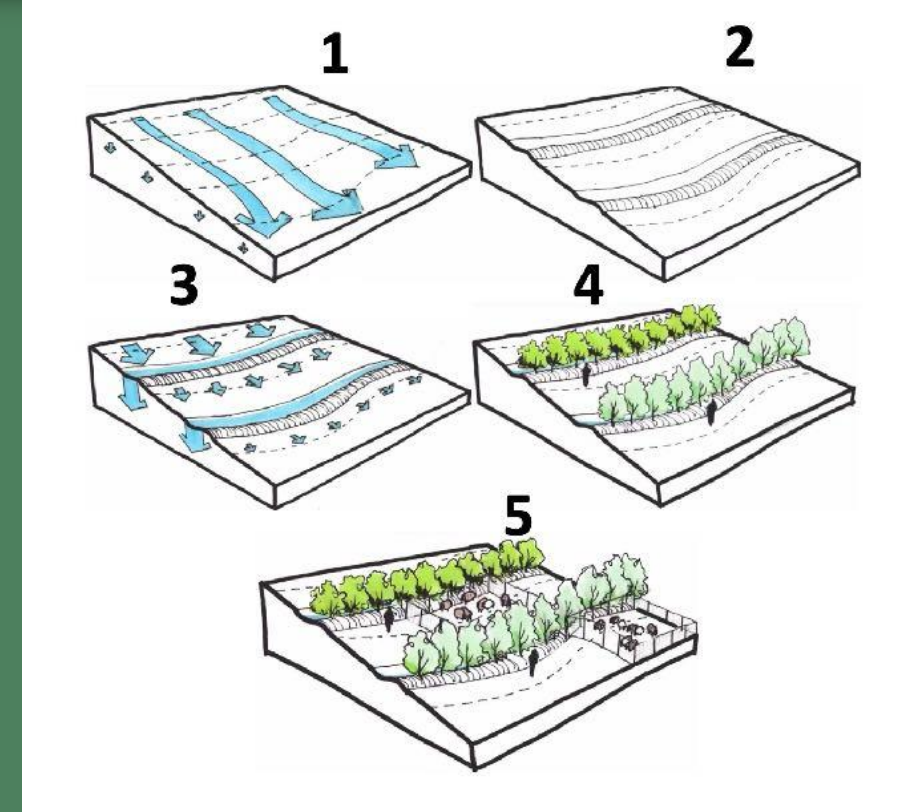


# PASSIVE WATER SYSTEMS

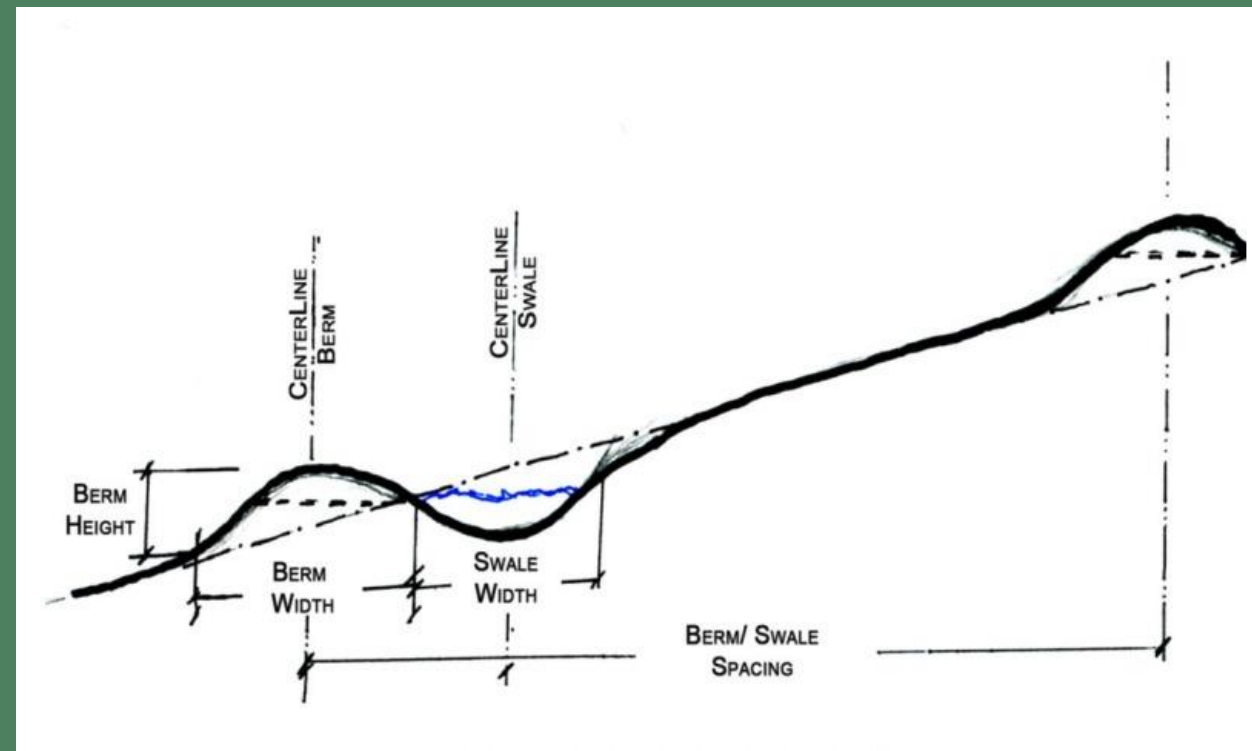
CONNECTING COMMUNITIES



Biological terracing brings deciduous banking into full play. Uphill swales filled in with woody matter in dry areas can be used to retain moisture for trees planted on a slope. Conversely, the very ground being cleared to make way for an orchard (where rainfall is not an issue) can provide a similar mycorrhizal resource to build up the planting terrace in the first place.



Diagrammatic Installation of Berms



Section of a Berm

Strategies for keeping water on site

Berms at work! Sinking water and transforming topography

# PASSIVE WATER SYSTEMS

**Hugelkultur** (German noun for "mound culture") is the practice of building a mound

using woody material such as felled trees along with other organic, carbon rich material, in order to sequester carbon into the soil to feed essential fungi. As the micorrhizal fungi are fed and the biomass breaks down, the mound becomes a nutrient rich berm where plants that enjoy well draining soil (such as many of our native plants) thrive. Another effect of a hugel berm is that it can be used in a variety of stormwater management techniques. Because it is so full of life, it acts as a sponge and reduces stormwater runoff through absorption and slowing the flow.

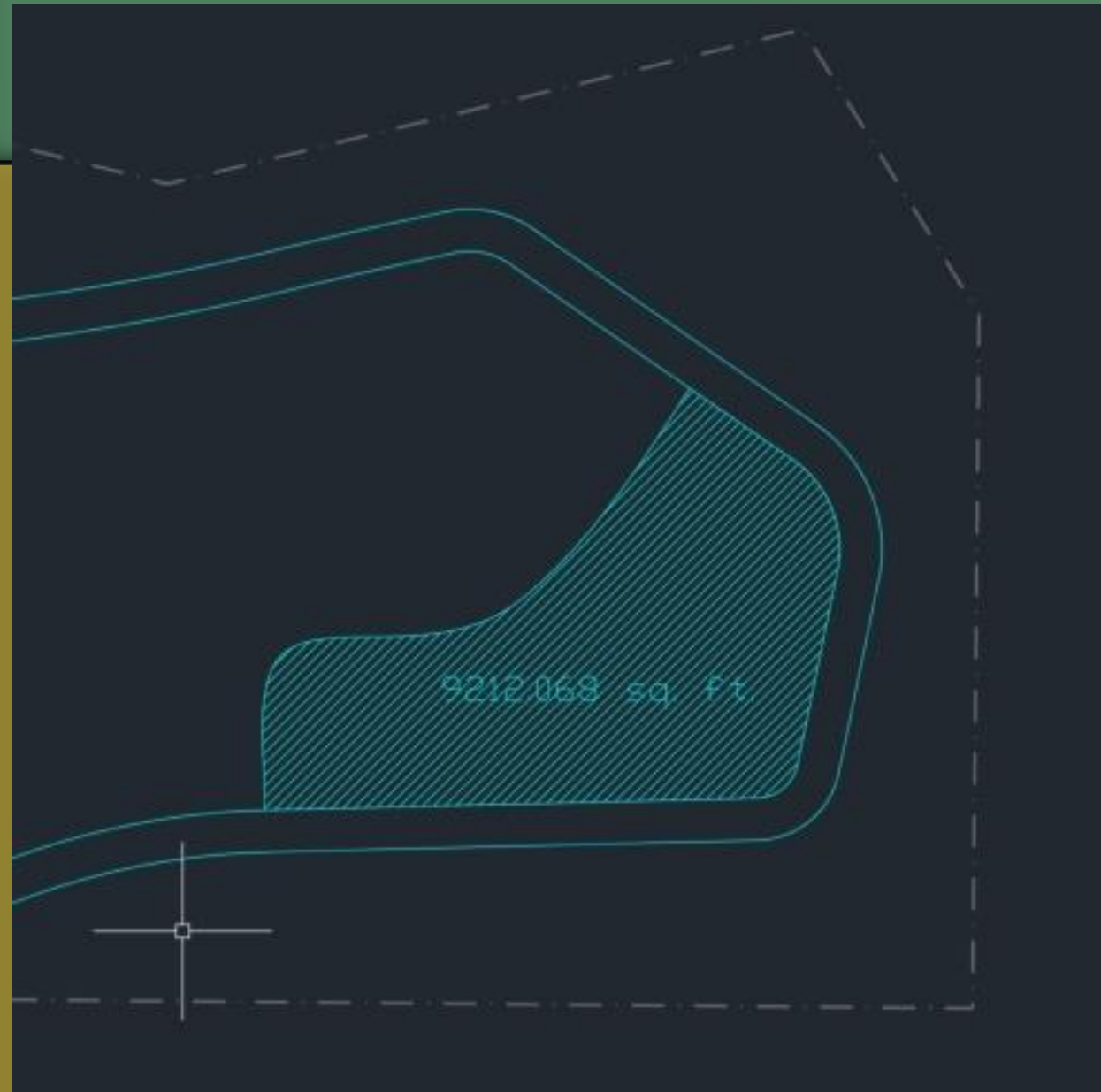
CONNECTING COMMUNITIES

Hugelkultur

Strategies for keeping water on site



community project. It is a great way to build and sustain life.





## **RUNOFF CALCULATIONS**

**Gallons per inch of rainfall** = square feet of roof collection area x runoff coefficient x 0.62

Assume runoff coefficient for roof is .95 for tile, bitumen, or asphalt shingle roof

### **Parking lot:**

$$9212.07 \text{ sqft} \times .95 \times .62 = \underline{5424.9 \text{ gal}}$$

### **Building Areas:**

$$2078.70 \text{ sqft} \times .95 \times .62 = \underline{1283.60 \text{ gal}}$$

$$7769.90 \text{ sqft} \times .95 \times .62 = \underline{4797.91 \text{ gal}}$$

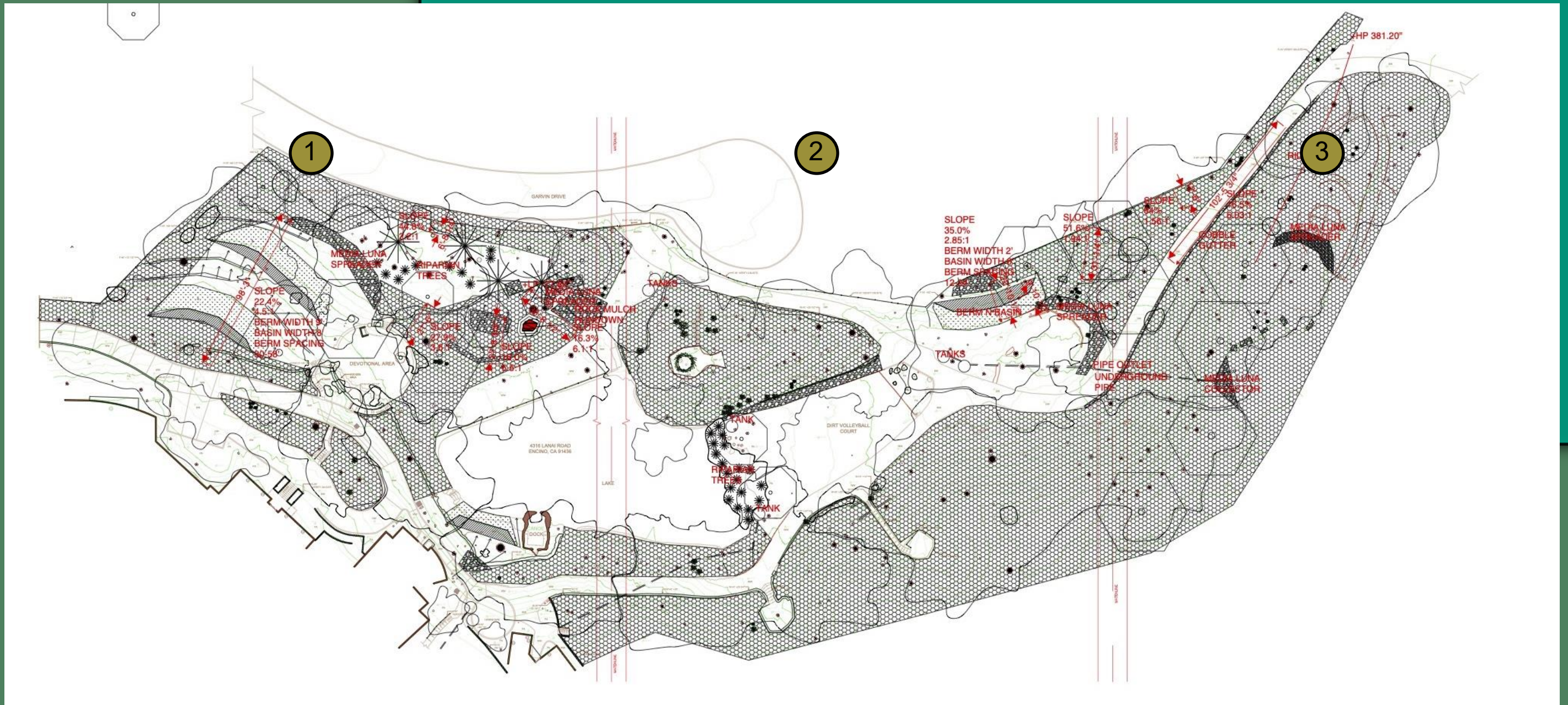
$$2857.85 \text{ sqft} \times .95 \times .62 = \underline{1764.72 \text{ gal}}$$

$$781.59 \text{ sqft} \times .95 \times .62 = \underline{482.63 \text{ gal}}$$

$$167.71 \text{ sqft} \times .95 \times .62 = \underline{103.56 \text{ gal}}$$

### **Building total:**

$$1283.60 \text{ gal} + 4797.91 \text{ gal} + 1764.72 \text{ gal} + 482.63 \text{ gal} + 103.56 \text{ gal} = \underline{7846.23 \text{ gal}}$$





## Dry Grasses for Berm and Slope Stabilization



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife supported	Days to Maturity	Thin to/ Final Spacing	Container	Maintenance	Special Notes	Water Needs	Sun Exposure
<i>Stipa pulchra</i>	Purple Needlegrass	Poaceae	3'x2'	Butterflies, Caterpillars	4	Deciduous-semi-evergreen. Cool Season	Red, Green, Purple, Cream Sp	Cut back after flowering to encourage new growth, but can also allow to go dormant.	State grass of California. Replaces Mexican Feather Grass. Walkable groundcover.	Low	FS
<i>Bouteloua gracilis</i>	Blue Grama	Poaceae	6-24"x2'	Butterflies, Caterpillars	5	Evergreen/Winter semi-deciduous Warm	Yellow Su	Pruning not necessary, but can be done in winter when dormant.	WOCULS Low). Plant at bottom of slope. Tolerates foot traffic.	Low	FS/PS

## Riparian Sedges



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife supported	Maintenance	Special Notes	Water Needs	Sun Exposure
<i>Eleocharis macrostachya</i>	Spike Rush	Cyperaceae	2-3'	Birds, Caterpillars Butterflies		Use in swamp. Evergreen	High	FS
<i>Carex praegracilis</i>	Clustered Field Sedge	Cyperaceae	2-4'x4'	Caterpillars Butterflies. Cover for small wildlife.	Can be mowed to create a lawn-like appearance. Lawn alternative.	Walkable. Use in swamp, swales, and on B n' B. Evergreen	Mod	FS

## Riparian Trees



Botanical name	Common Name	Plant Family	Height x Spread	Days to Germination	Days to Maturity	Thin to/ Final Spacing	Container	Maintenance	Special Notes	Water Needs	Sun Exposure
<i>Salix Lasiolepis</i>	Arroyo Willow	Salicaceae	7-35'x15'	Bats, Butterflies, Caterpillars	224	Wi Deciduous	Cream, Yellow Wi/Sp	Remove dead branches. Prune to shape in winter.	Roots can be aggressive. Readily spreads through roots and layering.	High	
<i>Acer macrophyllum</i>	Big Leaf Maple	Aceraceae	30-115'x65'	Bats, Birds, Butterflies, Caterpillars	87	Winter Deciduous	Yellow, Pink Wi/Sp	Remove dead and crossing branches. May be pruned by 25% to control size.	Shot Hole Borer, root diseases. Agresive roots; plant away from foundations and water pipes.	Mod	
<i>Populus fremontii</i>	Fremont Cottonwood	Salicaceae	39-115'x35'	Bats, Birds, Caterpillars, Butterflies, cover for small and large mammals.	134	Winter Deciduous	Sp/Wi		Females have to potential to cause fewer allergies than males.	Mod	

## Riparian Shrubs



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	WOCULS
<i>Artemisia douglasiana</i>	Mugwort	Asteraceae	8'x4'	Bats, Birds, Butterflies, Caterpillars	31	WI Semi-deciduous	Yellow, Cream, White Sp/Su	May be cut back to ground during dormancy.	Medicinal plant. Spreads by rhizomes. May be aggressive.	Mod
<i>Baccharis salicifolia</i>	Mulefat	Asteraceae	6-12'x3-9'	Bats, Butterflies, Caterpillars, Birds	29	Evergreen, Su Semi-deciduous	Yellow, Pink, White Year Round	Tolerates heavy pruning. Prune to shape or down to the ground if looking scraggly.	Highly drought tolerant once established, looks best with summer irrigation.	High
<i>Erythranthe cardinalis</i>	Scarlet Monkeyflower	Phrymaceae	2-3'x3'	Bats, Butterflies, Caterpillars, Bees, Hummingbirds, Birds	10	Evergreen	Red, orange Sp/Su/Fa	Deadhead to promote flowering and prevent floppy growth.	Readily reseeds. Plant with Hedgenettle and Western Columbine. CF	Mod-high

N

Low Slope



*Rosa californica*

Food- drinks (tea and mead)  
 Medicine- colds, coughs, sore throats; infant and mother care; stress and anxiety

Collection-flower, leaf: summer. Fruit (hip):fa



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	WOCULS
<i>Rosa californica</i>	California Wild Rose	Rosaceae	8-10'x10'	Bats, Butterflies, Caterpillars	72	Wi Deciduous	Red, Pink, White Sp, Su	Prune to the ground in late su-fa. Plant away from paths. Roots can be aggressive.	Provides cover for birds. .Edible May have problems with rust, mildew. Aphids.	Low-variable
<i>Rubus ursinus</i>	California Blackberry	Rosaceae	2-6'x6'	Bats, Butterflies, Caterpillars	67	Wi Semi-deciduous	White Wi/Sp	Prune during winter dormancy to shape and control spread.	Thorny. Plant away from paths and play areas. Edible	Low--variable

Low Slope



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	WOCULS
<i>Vitis girdiana</i>	Desert Wild Grape	Vitaceae	10-50'x spreading	Bats, Caterpillars, Butterflies, Birds	32	Wi Deciduous	Green Sp	Fast growing. Can be held in check with regular pruning. Use as mounding groundcover or climbing up trellis or pergola.	Fall color. Does better than <i>Vitis californica</i> , California Wild Grape, in the hot inland setting.	Low-Mod
<i>Aquilegia formosa</i>	Western Columbine	Ranunculaceae	2-3'x1'	Bats, Butterflies, Caterpillars, Birds	5	We Deciduous, Evergreen	Red, yellow Sp	Deadhead if desired or allow flowers to go to seed.	Self Sows. Interesting geometric shape when looked at from the bottom of the flower, up.	Mod

## Under Oak Slope Stabilization



*Fragaria vesca*

Food: strawberries  
Medicine- diarrhea, wounds.

Collect-leaf: all seasons; fruit: summer



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	WOCULS
<i>Fragaria vesca</i>	Woodland Strawberry	Rosaceae	1-12"x3'	Bats, Birds, Butterflies, Caterpillars	42	Evergreen	White Wi/Sp	Contain with string trimmer. Annual spring pruning will freshen plantings and prevent thick-layered colonies. Spreads by runners. Lawn alternative.	Plant at a low spot/supply additional irrigation. WOCULS Moderate, but goes so well under oaks and other species. E. CF	L-Variable
<i>Ribes aureum</i>	Golden Currant	Grossulariaceae	3-10'x3-10'	Hummingbirds, Birds, Bees, Caterpillars, Butterflies.	84	Wi Deciduous	Cream, Red, Yellow Wi/Sp	Remove unwanted suckers to contain spread. Prune to desired shape.	Plant at edge of canopy. Tolerates full sun. Susceptible to rust. E.	VL-Variable
<i>Diplacus aureus</i>	Bush Monkeyflower	Scrophulariaceae	4-5'x5'	Bats, Birds, Butterflies, Bees, Caterpillars, Hummingbirds	8	Evergreen, Su semi-deciduous	Yellow, Orange, Red, White Wi/Sp	Deadhead to increase flower production. Pinch back new growth in spring to maintain more compact growth if desired.	Short lived but self seeds. Great companion plant. CF.	VL-Variable

## Sunny Slope Stabilization



*Quercus agrifolia*,

Medicine- diarrhea, eye infections, infant and mother care, poison oak.  
 Food- deserts, tofu, tortillas, oak nut flour.  
 Cultural- dyes and paints, floral arrangement  
 Collection: Bark, Twig: all seasons; Nut: fall.



*Salvia apiana*

Food; spice, fried leaves, seeds.  
 Medicine- stomach disorders, strength.  
 Cultural- flower arrangements, purification ceremonies.

Collect- flower seeds, stalks, leaves su



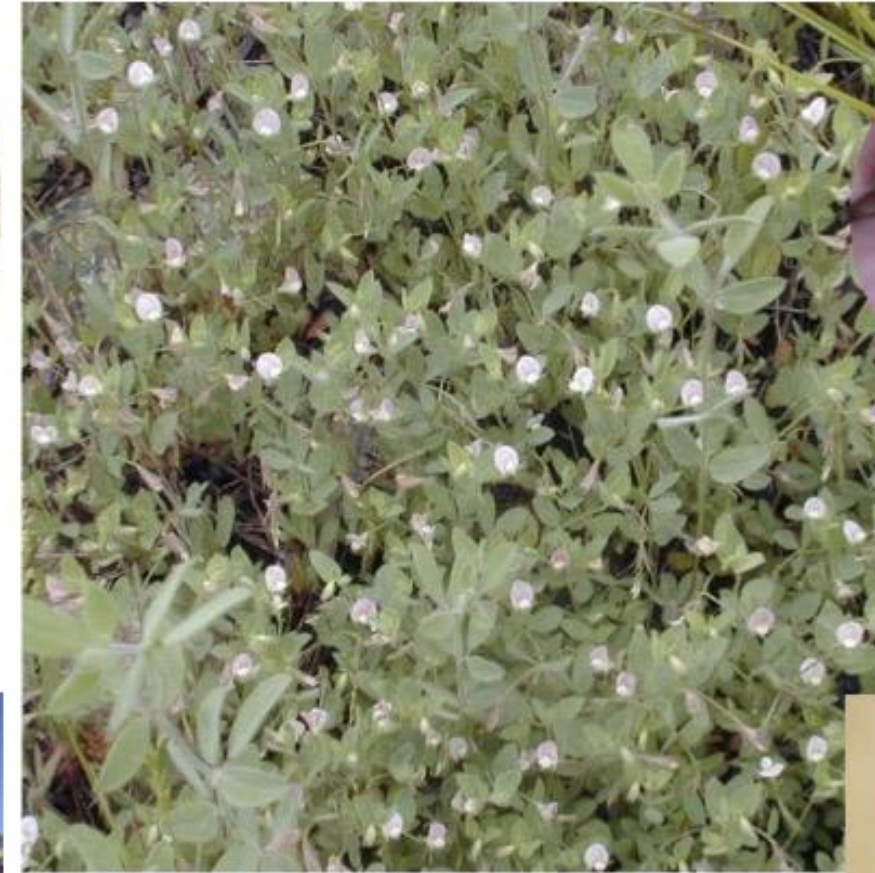
Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	WOCULS
<i>Ceanothus oliganthus</i>	Hairy Ceanothus	Rhamnaceae	10'x12'	Bats, Butterflies, Caterpillars, Birds, bees, hoverflies.	93	Evergreen	Blue, purple Wi	Prune to shape after berries are done and before vegetative stage.	Bank Stabilization, hedge. Endemic. Avoid summer water after establishment. Keystone Sp.	vl
<i>Prunus ilicifolia</i>	Hollyleaf Cherry	Rosaceae	30-49'x20'	Bats, Butterflies, Caterpillars	144	Evergreen	Cream, White Wi/Sp	No maintenance for the first few years. Prune to shape. Clean fallen fruit from paths.	Good street tree for small-med parkways. E	vl
<i>Salvia apiana</i>	White Sage	Lamiaceae	3-5'x3-8'	Bats, Butterflies, Caterpillars, Hummingbirds, Bees, Birds	10	Evergreen, Su semi-deciduous	White Su/Fa	Flower stalks may be removed when finished in late summer. Sprawling branches may be removed if desired at any time.	Distinct fragrance. Deeply rooted in the cultures of the Indigenous Communities of Southern California. Threatened by poaching.	vl

## Wildflowers



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# Of Lepidoptera	Seasonality	Bloom Color/Season	Maintenance	Special Notes
<i>Antirrhinum coulterianum</i>	Coulter's Snapdragon	Plantaginaceae	5-59"	Bats, Bees, Hummingbirds, Butterflies, Caterpillars	10	Annual	White Sp	May pull dead plants and use as mulch.	Self seeds. Addition of biochar over sown seeds greatly improves germination.
<i>Camissoniopsis bistorta</i>	California Sun Cup	Onagraceae	2-3'x3'	Bats, Butterflies, Caterpillars	4	Annual	Yellow, Red Sp/Su	May pull dead plants and use as mulch.	Self seeds. If planted before winter rains, no additional irrigation required. CF
<i>Clarkia unguiculata</i>	Elegant Clarkia	Onagraceae	3'x3'	Bats, Bees, Butterflies, Caterpillars	5	Annual	Pink, Red Su/Fa	May pull dead plants and use as mulch.	Self Seeds. Tolerates shade. Good for Hydrozone 2. CF
<i>Eschscholzia californica</i>	California Poppy	Papaveraceae	2-24"x1-2'	Bats, Bees, Butterflies, Caterpillars, Birds	7	Annual, Perennial	Orange Year round	In many parts of Southern California, may be a perennial. You may pull plants or cut to the ground and allow to regrow. Plants from last season will be the first to bloom.	Medicinal use-stress, anxiety, sleep. Cultural use-dyes and paints. Readily self seeds. CF
<i>Phacelia tanacetifolia</i>	Lacy Phacelia	Boraginaceae	2-4'x2'	Bats, Bees, Butterflies, Caterpillars	9	Annual	Blue, Purple, Lavender Sp	Pull dead plants and use as mulch.	Vigorously self seeds. Dead stems can cling to pets.

## Bank Side Wildflowers



Botanical name	Common Name	Plant Family	Height x Spread	Wildlife Supported	# of Lepidoptera	Seasonality	Bloom Color/ Season	Maintenance	Special Notes	Calscape
<i>Lupinus succulentus</i>	Succulent Lupine	Fabaceae	2-4'x3'	Bats, Birds, Bees, Butterflies, Caterpillars	51	Annual	Blue, Lavender, White Wi/Sp	Remove dead plant after seeds mature or pop.	Seeds should be left to fall naturally. If collected, should be soaked in hot water and scarified.	High
<i>Acmispon Americanus</i>	American Bird's-Foot Trefoil	Fabaceae	1'x1'	Butterflies, Caterpillars, Bees	28	Annual	Pink, White Sp/Su	Remove dead plant after seeds mature or pop.	for propagation by seed; soak in hot water for 24 hours.	Low, Mod, High

### What is phytoremediation?

It is the use of plants to clean and restore contaminated environments by removing pollutants in soils, water, and air. Various plants and their associated microbes absorb, transform and stabilize contaminants such as heavy metals, pesticides and oil in their tissues. It is a cost effective and environmentally-friendly technology. Plants that store these contaminants in their tissues are periodically cut back and green waste is disposed of to remove the contaminants off site. The plant palette used in phytoremediation are locally native species that provide habitat to local wildlife and contribute to soil health while serving the purpose of phytoremediation.

### Some highlighted species selected for phytoremediation purposes are listed below:

*Eleocharis macrostachya*, Common spikerush, removes arsenic (Fraser, 2001)( Márquez, 2020).

*Stipa pulchra*, purple needlegrass, removes and stores Polycyclic Aromatic Hydrocarbons, PAHs, in the roots, chlorinated dioxins/furans in the roots, and lead in the roots and foliage (Poltorak, 2015)

*Baccharis salicifolia*, mule fat, removes and stores cadmium in the roots and foliage (1.84 mg/kg and 3.64 mg/kg) (Poltorak, 2015)

*Carex praegracilis*, clustered field sedge, though has not been directly studied, a related species *Carex rostrata* is known to remove Ag, ZnO, TiO<sub>2</sub>, Pd/BiVO<sub>4</sub>/BiOBr, and Pd/Cu<sub>2</sub>O Engineered nanoparticles (ENPs) (Ebrahimbabaie, 2023). *Carex praegracilis* was chosen due to it having a local native range and potential phytoremediation qualities.



Baja California Treefrog (*Pseudacris hypochondriaca*)



California Newt (*Taricha torosa*)



California Scrub Jay (*Aphelocoma californica*)



Gray Fox (*Urocyon cinereoargenteus*)



California Quail (*Callipepla californica*)



Western Spadefoot Toad (*Spea hammondii*)



Wilsons Warbler (*Wilsonia pusilla*)



California Red-legged Frog (*Rana draytonii*)



Little Brown Bat (*Myotis lucifugus*)



Western Gray Squirrel (*Sciuridae griseus*)



California Treefrog (*Pseudacris cadaverina*)



Southern Alligator Lizard (*Elgaria multicarinata*)



Red-tailed Hawk (*Buteo jamaicensis*)

Our plant palette and stormwater management plan work hand in hand to create a low-impact design that not only manages water but actively supports wildlife. By drawing from locally native plants of riparian woodland, oak woodland, aquatic, and upland habitats, we've maximized the site's capacity to provide food, shelter, and resilience for a diverse range of species. At the same time, our stormwater plan mimics natural hydrological systems, ensuring that water moves through the landscape in ways that sustain these habitats.

Central to this effort is the protection of species under pressure, such as frogs, whose populations have sharply declined due to urbanization. Frogs, along with other water-dependent wildlife, are vital indicators of ecosystem health—and their presence signals that our landscape is thriving. Supporting these species benefits people as well: they help steward the land, control pests, enhance biodiversity, and offer profound mental health benefits by reconnecting us with the rhythms of a living ecosystem.



Restoring a park in Encino to a riparian landscape with Southern California native plants is not only an ecological investment, but also a human one. Native riparian plants—such as willows, sycamores, and sedges—would stabilize soils, filter stormwater, and provide essential food and shelter for insects, birds, and mammals. This restored biodiversity creates a living system that functions in balance with local hydrology, while offering people shade, cleaner air, and cooler microclimates during hot summer months. Importantly, the presence of native plants also preserves cultural identity by reconnecting the community to the natural landscapes that shaped Southern California’s history. In this way, restoration work ensures that both ecosystems and communities thrive together.

But beyond ecological function, research shows that contact with green spaces can directly benefit our mental health and cognitive performance. As reported by **Dana G. Smith** in *The New York Times* (“**A Surprising (and Easy) Way to Boost Your Attention Span,**” Aug. 14, 2025), studies demonstrate that spending even short amounts of time in nature restores attention, strengthens working memory, and improves focus—boosting test scores by nearly 20 percent after a walk in a park compared to an urban street. This effect, known as “attention restoration theory,” suggests that the softly fascinating qualities of natural landscapes—rippling water, the branching of sycamores, the arcs of riverbanks—allow our brains to rest and recharge. By restoring Encino’s park with native riparian habitats, the community would gain more than a biodiverse refuge; it would secure a restorative landscape where residents can find clarity, focus, and well-being, supported by growing scientific evidence and thoughtfully conveyed by Smith and *The New York Times*.

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Thank You