

Naturescaping Basics



Agenda

Part 1:

Introduction to Naturescaping

Naturescaping Examples & Design Principles

Part 2:

Site Analysis & Design Process

Naturescaping Concepts & Methods

Part 3:

Plant Selection Tips

Summary: Design Principles in the Landscape

Part 1:

Introduction to Naturescaping

&

Naturescaping Examples and
Design Principles

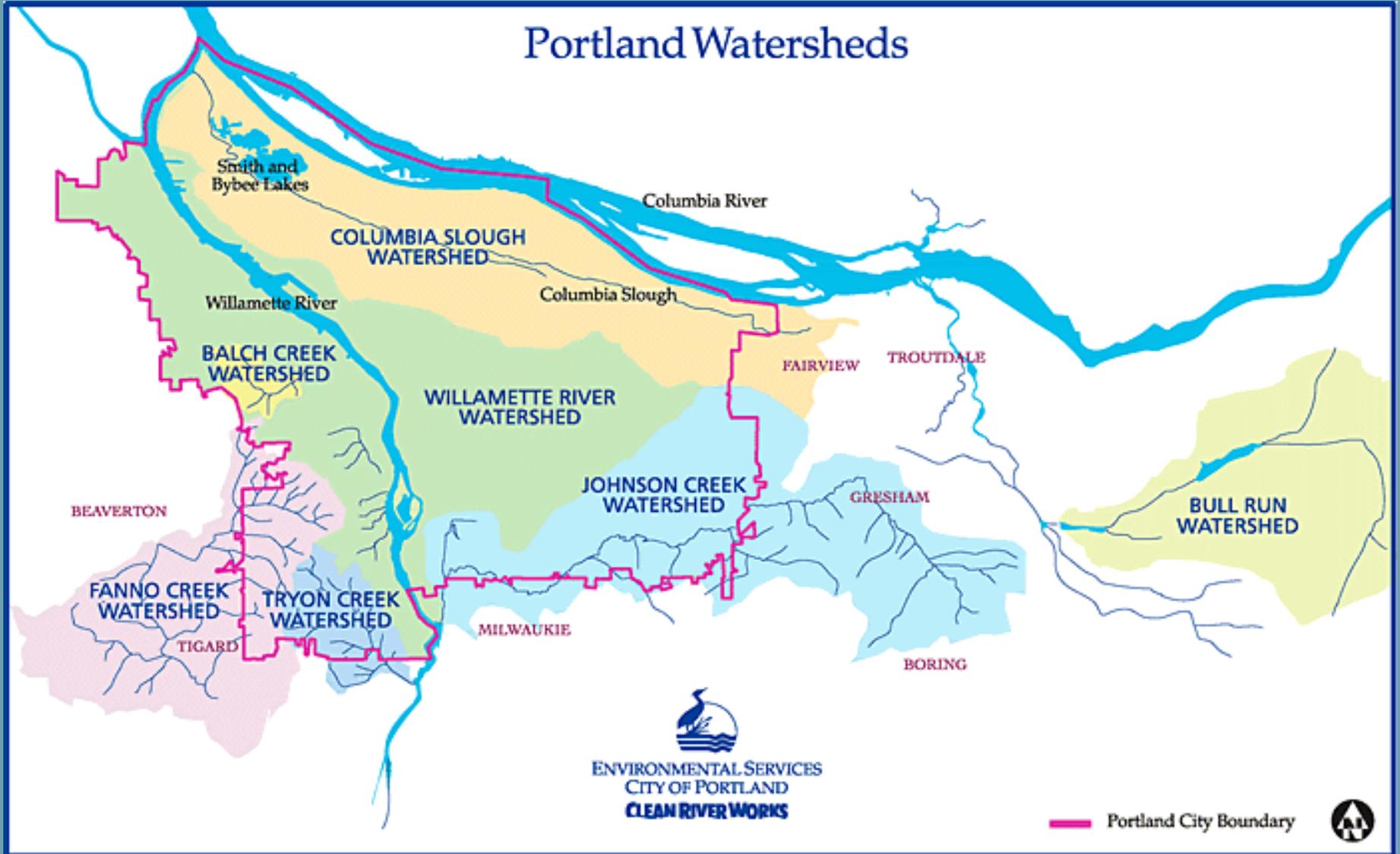
Introduction to Natureescaping

What is Naturescaping?

Naturescaping is the practice of designing (or redesigning) a landscape so that it reduces water use, stormwater runoff, and pollution without sacrificing splendor. It also saves you time money and energy – all while providing beautiful habitat for wildlife and you.

The practice of Naturescaping focuses primarily on native plants, and selecting “the right plant for the right place”.

Naturescaping = Healthier Watersheds



Watersheds

Urban Growth Boundary



Basins

Clackamas River



Columbia River



Multnomah Channel



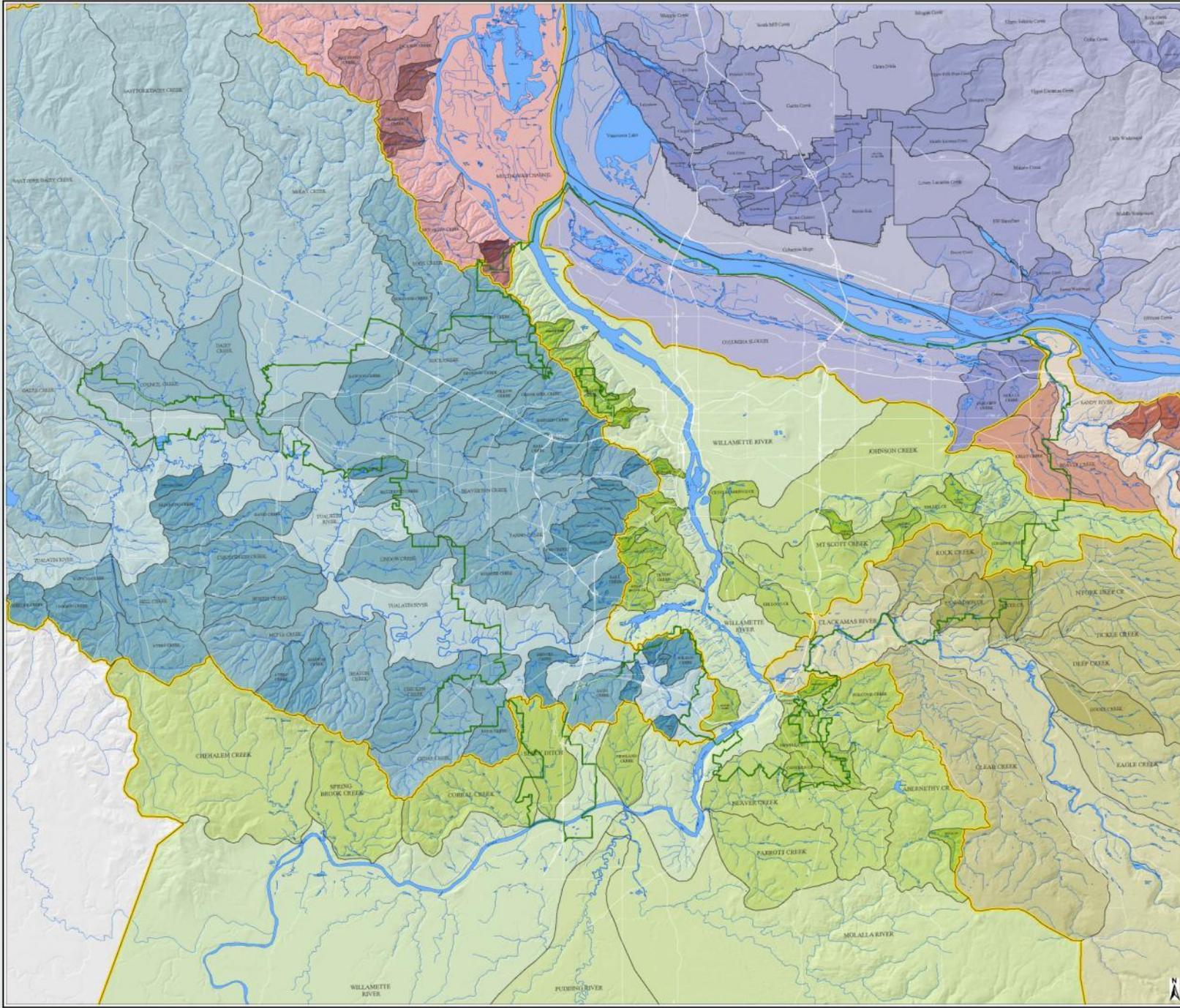
Sandy River



Tualatin River



Willamette River



NOTES:
This map was prepared by the Oregon Department of Water Resources, Portland, Oregon, in cooperation with the Oregon Department of Fish and Wildlife, Salem, Oregon, and the Oregon Department of Transportation, Salem, Oregon. The map is intended for informational purposes only and should not be used for legal or regulatory purposes. The map is not a warranty of any kind.

Scale: 1 inch equals 17 miles
0 17 Miles



Location Map

DATA SOURCES:
NORTHWESTERN ORIGIN SERVICE, PORTLAND, OREGON 97208
US GEOLOGICAL SURVEY, PORTLAND, OREGON 97208
ORIGINS: 2010-11-01 10:00 AM PST

Naturescaping Examples & Design Principles

Naturescaping Examples



Before Naturescaping

After Naturescaping



- Removed most of lawn, kept a small patch for sitting
- Right plant right place: high water use plants near lawn

Before Naturescaping



After Naturescaping – 5 years later



- Lawn removal & installation of perennials and paths
- Multiple layers, variety of species & feeders provide wildlife habitat

Early Naturescaping



After Naturescaping – 1 year later



- Plant placement provides privacy & helps block view of fences
- Edging separates beds from gravel pathway



Before:

Large expanse of lawn required a lot of watering

Problem with cars driving over the sharp corner



During:

Replaced lawn with
boulders & drought
tolerant plants



After:

Beneficial perennials
& native ground
covers add beauty to
the church & also
resolve traffic
problem.

Before Naturescaping



During



- Yard immediately after lawn removal & initial planting
- Did not mulch to protect from erosion and weeds

One year later...



- Nature fills a vacuum = lots of weeds!
- Anticipate maintenance

Naturescaping Design Principles



- Alternatives to Lawn & Grass
- Layering of Vegetation
- Seasonal Interest
- Planting for Energy Conservation
- Creating Wildlife Habitat
- Low Maintenance Landscapes
- Water Conservation Practices
- Incorporating Native Plants
- Stormwater Solutions

Lawn Alternatives



Groundcover



Pavers



Lawn removal from slope

- was difficult to mow and not used
- Replaced lawn with deeper rooted plants



Groundcover, woodchip pathways & vegetable beds

Layering of Vegetation



Creates Habitat



Year-round Features



Energy Conservation



Using trees & plants for shade, windbreaks, etc.

Wildlife Habitat



Food, Water, Shelter



Honeybees



Water Source



Nesting opportunities for native pollinators



Snags and woody debris for shelter, nesting & perches.



Variety of flowering & fruiting plants provide food throughout the year and invite pollinators.

Soil Stabilization



Combination of plants with varied root depths stabilize soil.



Typical sloping side lawn



Bank stabilized with rocks & drought tolerant plants



Slope with variety of densely planted vegetation.



Terracing with retaining walls.

Stormwater Solutions

Keeping or using stormwater on site



Rain Gardens



Stormwater Planters



Rainwater Harvesting



Pervious Surfaces – Parking Lots, Driveways & Pathways



Eco – Roofs / Green Roofs



Quick Break

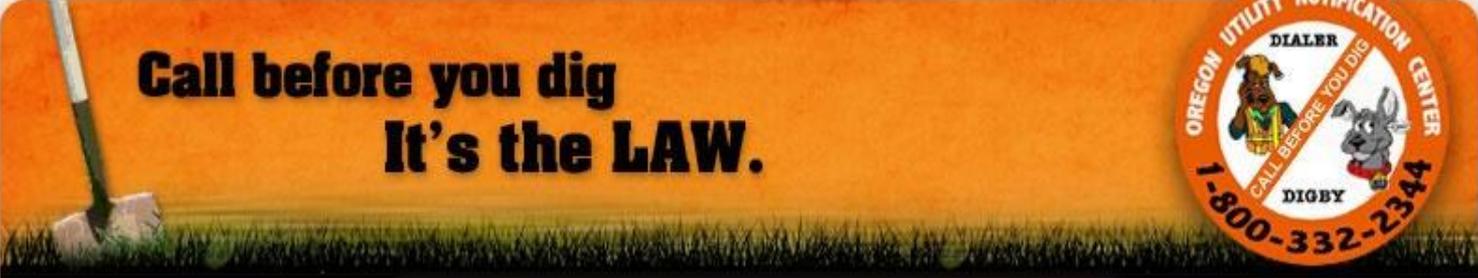
Part 2:

Site Analysis and Design Process

&

Naturescaping Concepts
and Methods

Site Analysis & Design Process



**Call before you dig
It's the LAW.**



Protect yourself from injury & prevent damages to underground utility lines, pipes and cables. Always call before you dig!

811

or

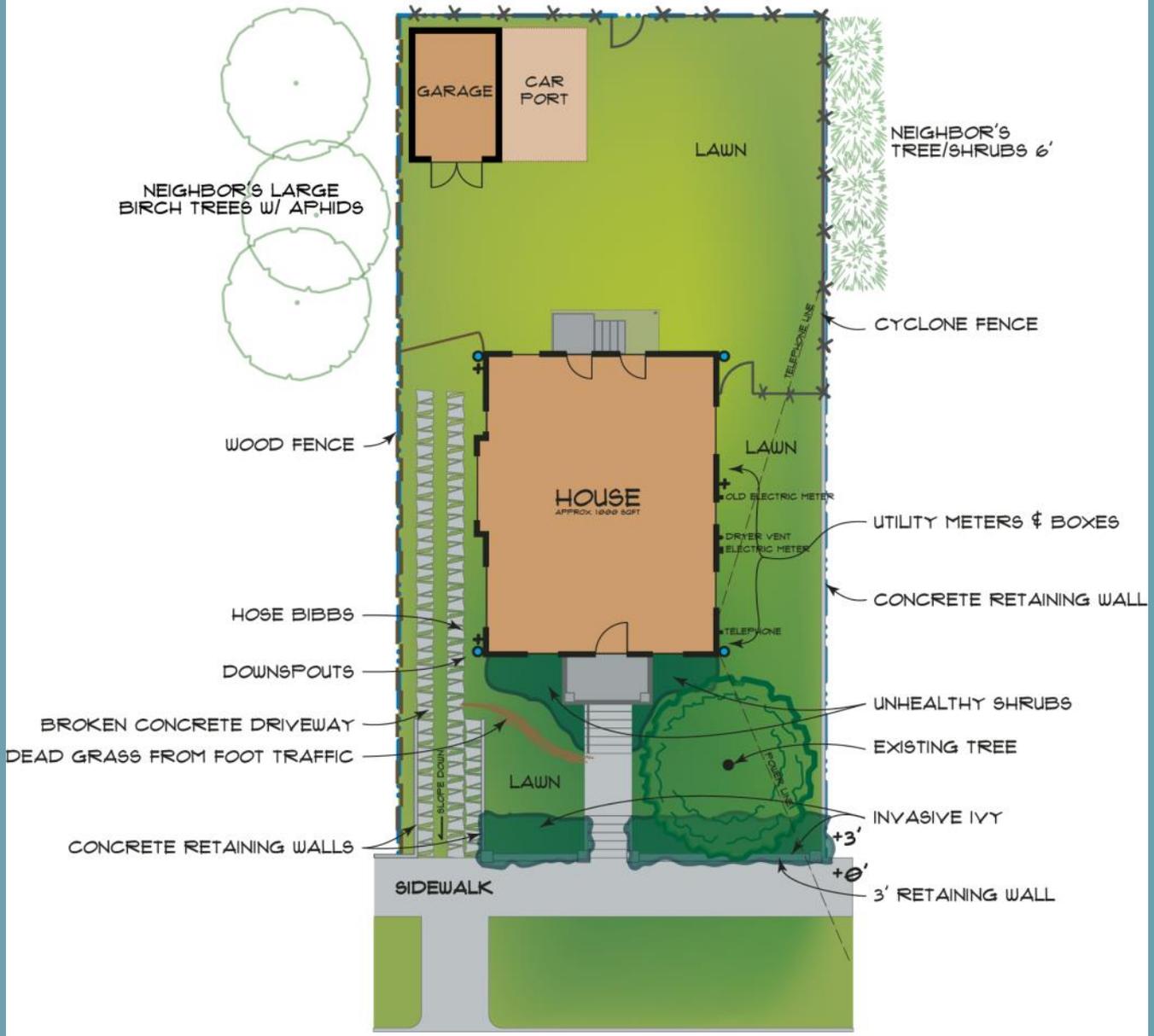
Oregon Utility Notification Center

1-800-332-2344

www.digsafelyoregon.com

- Available 24 hours/day to process locate requests
- Call at least 2 business days before you dig

ALLEY

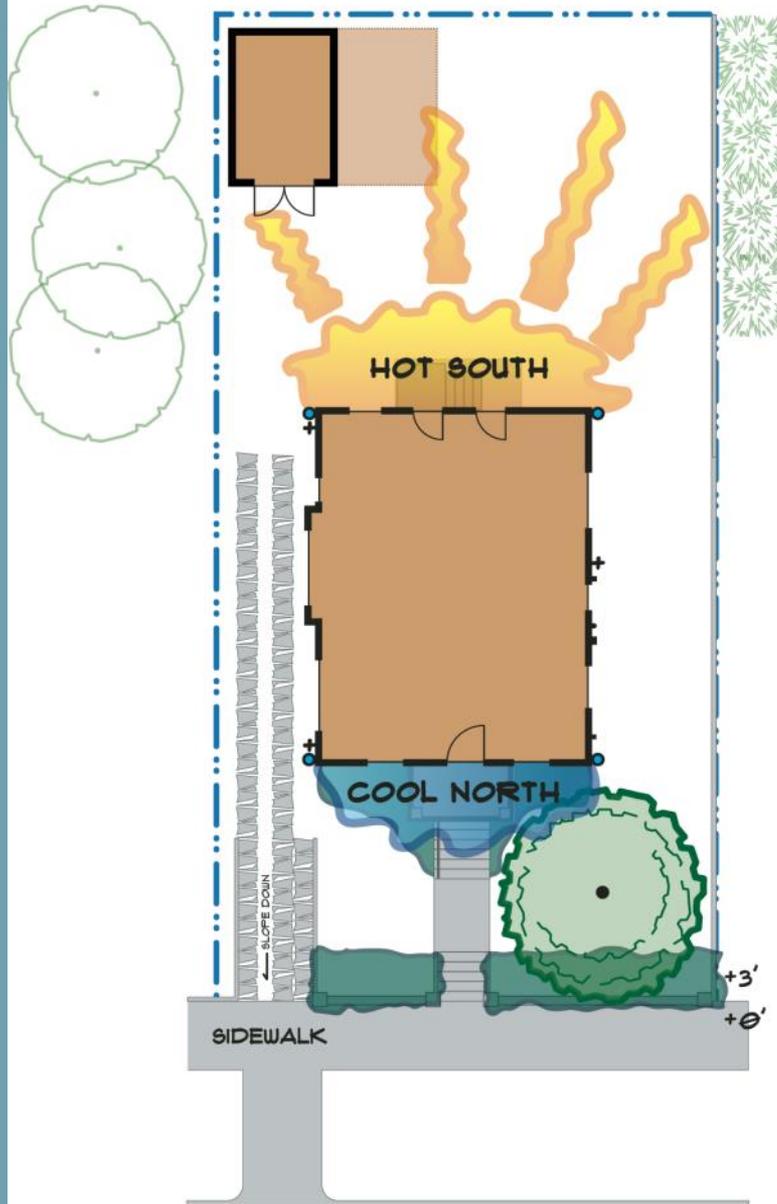


EXISTING CONDITIONS

1' 5' 10'



ALLEY

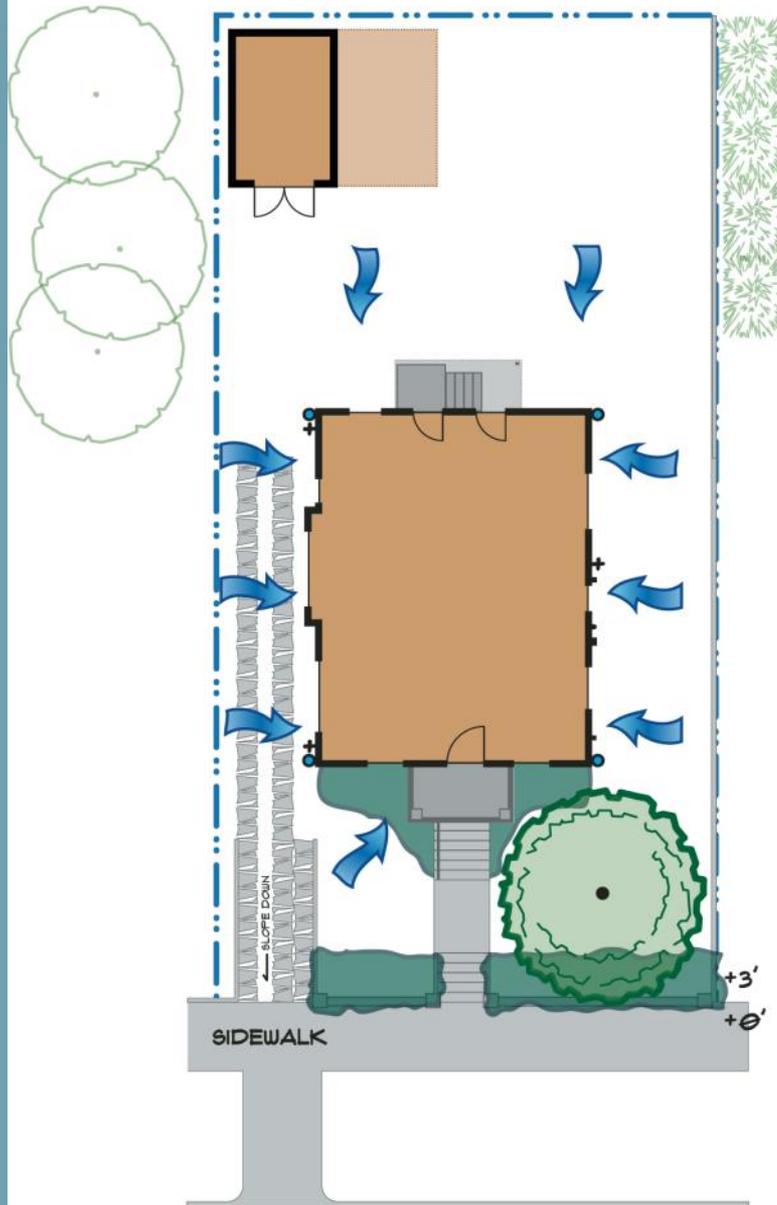


SITE ASSESSMENT: EXPOSURE

1' 5' 10'



ALLEY

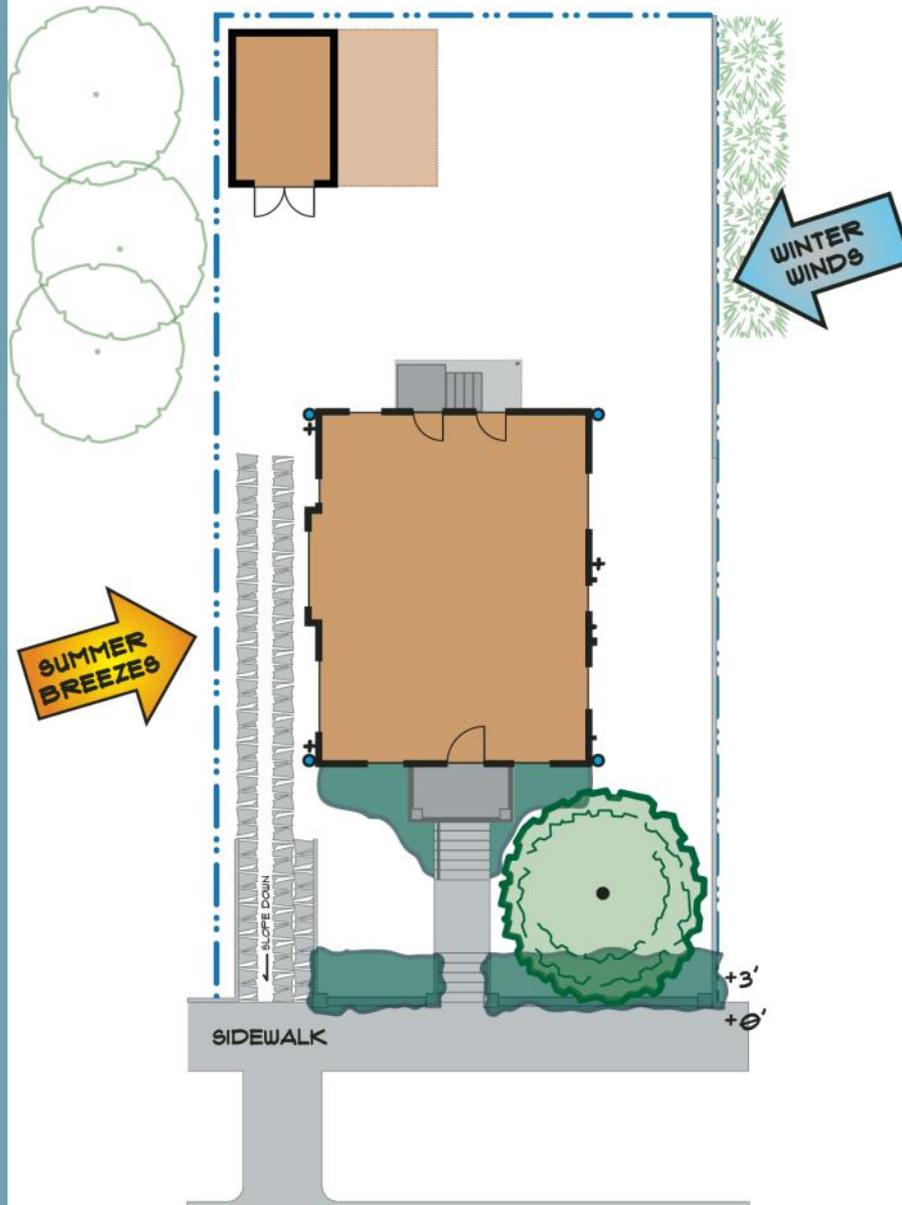


SITE ASSESSMENT: DRAINAGE

1' 5' 10'



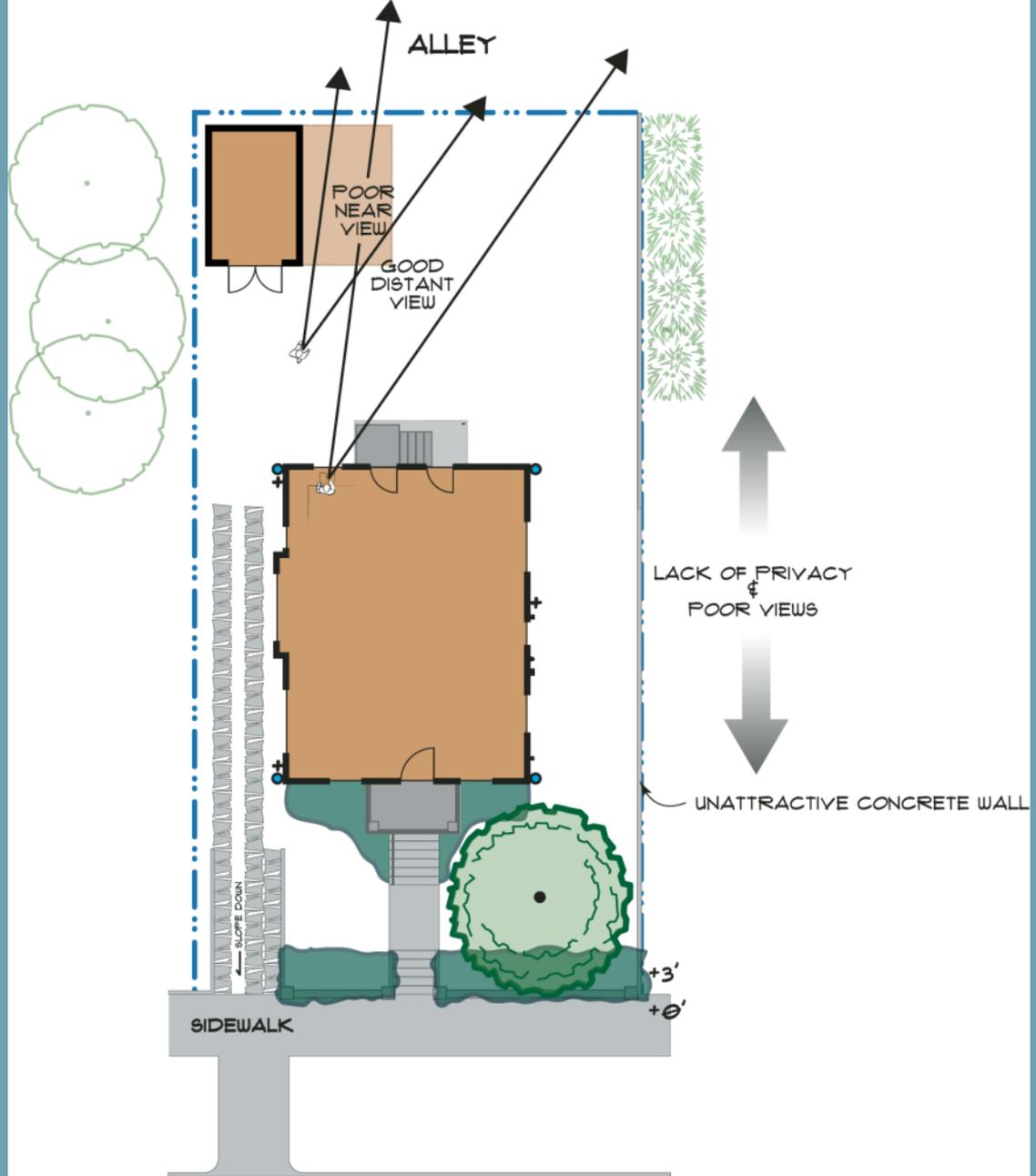
ALLEY



SITE ASSESSMENT: WIND

1' 5' 10'

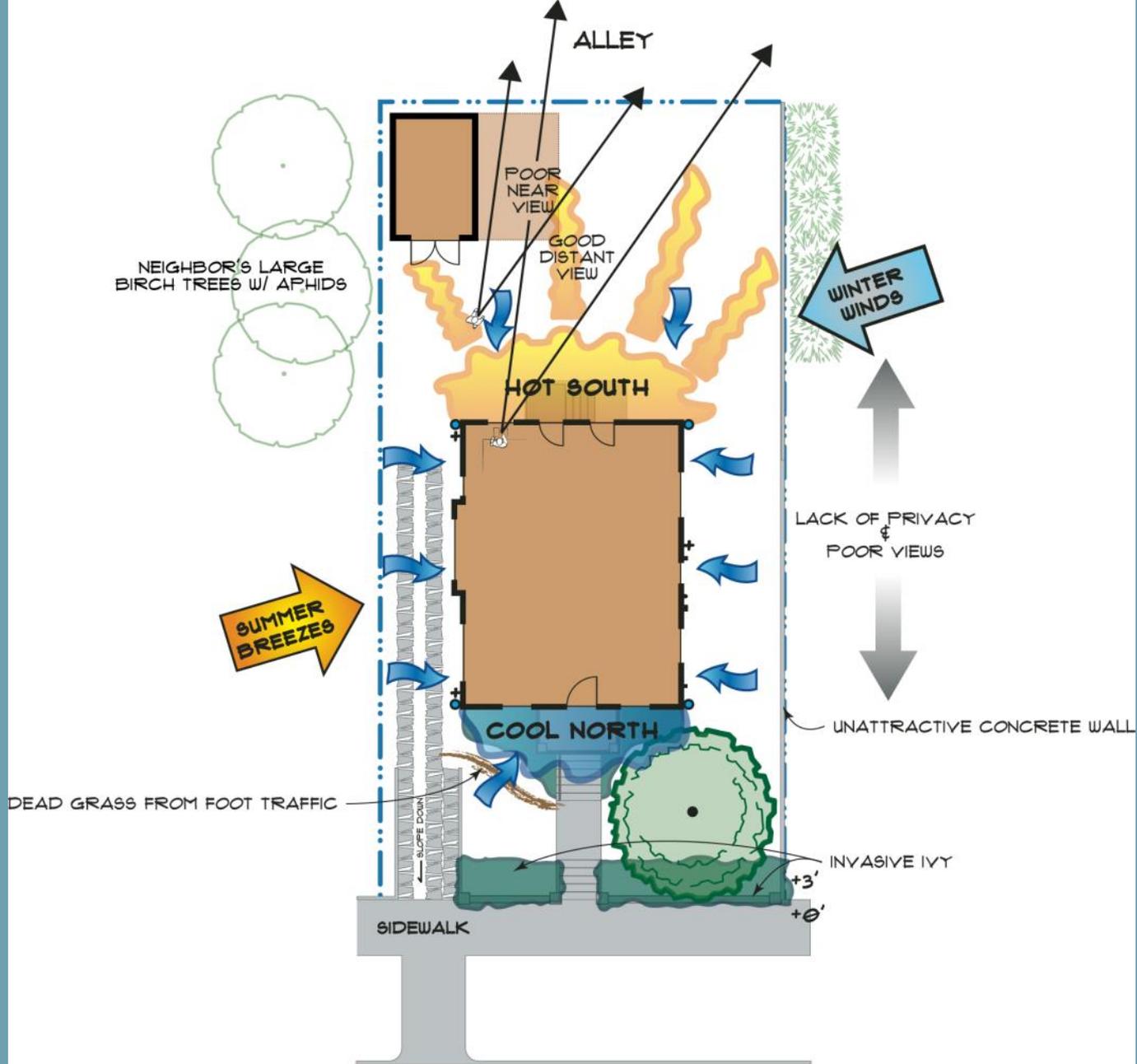




SITE ASSESSMENT: VIEWS

1' 5' 10'





SITE ASSESSMENT: ALL FACTORS

1' 5' 10'

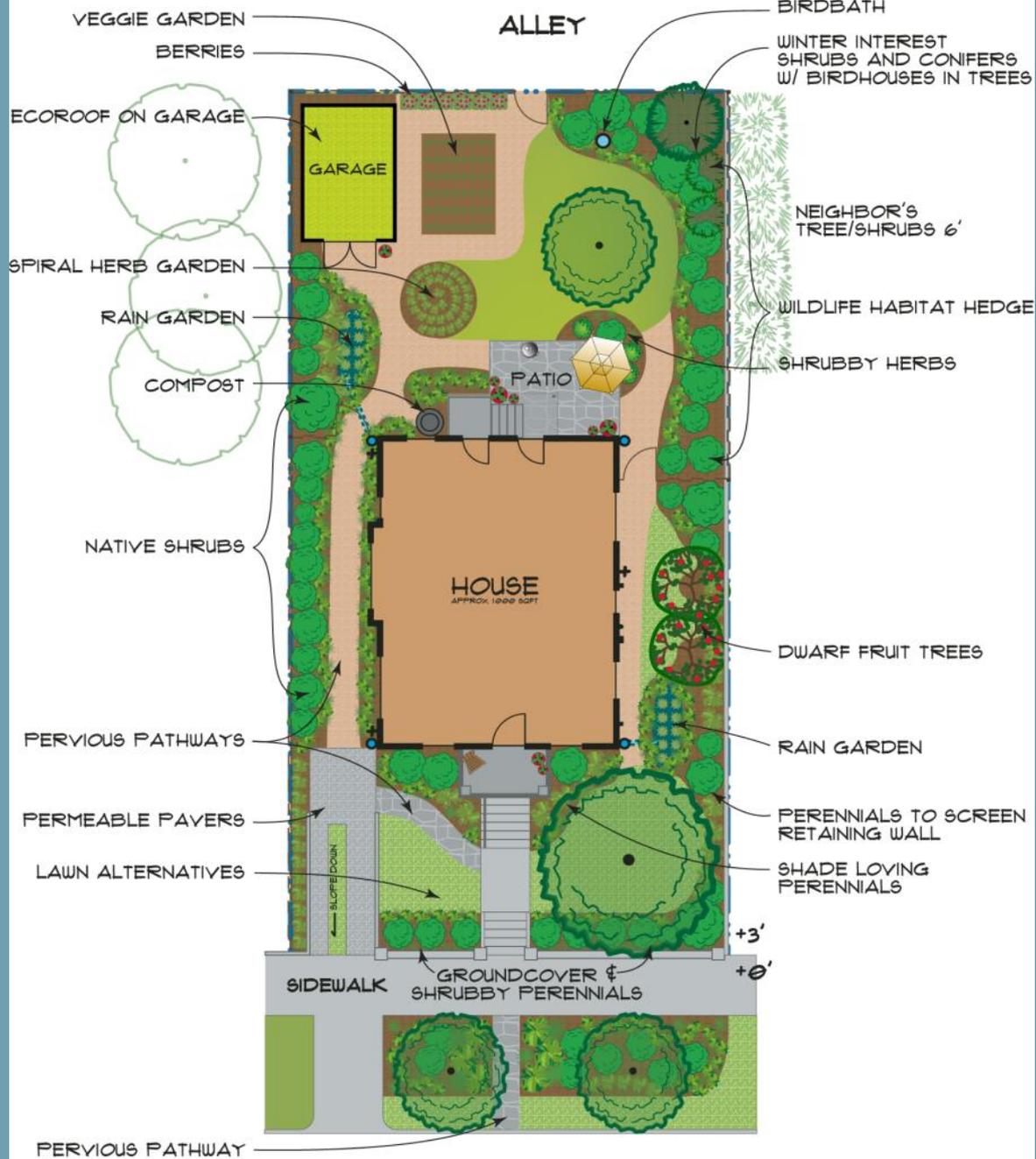




DESIGN OPPORTUNITIES

1' 5' 10'





MASTER PLAN

1' 5' 10'



Naturescaping

Concepts & Methods

- Pollution Prevention
- Soil Health
- Water Conservation
- Lawn Alternatives & Removal
- Pest Management

Why Pollution Prevention?

Pesticides

Rain can wash freshly sprayed pesticides into storm drains, streams, rivers, oceans, etc.



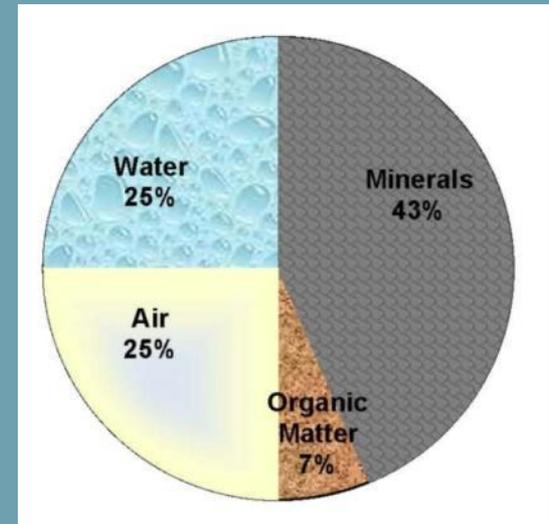
Fertilizers

Fertilizer nutrients that are unused by plants attach to soil particles and get washed into storm drains and into local streams and rivers.



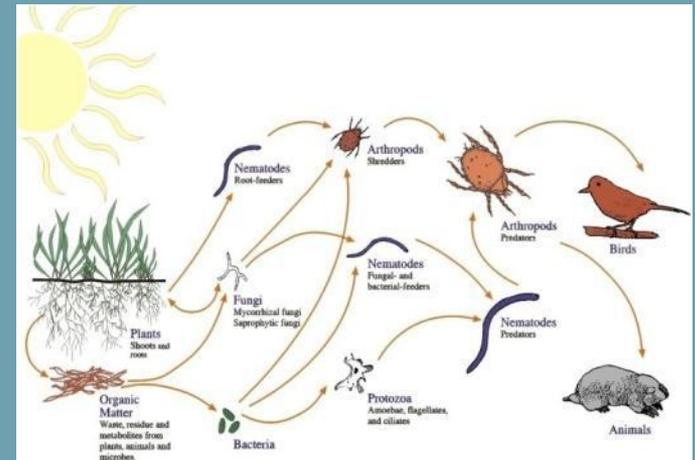
What is Soil

SOIL is made up of minerals, water, air & organic material. Life in the soil includes earthworms, bacteria, algae, fungi and protozoa



TEXTURE: the relative proportion (%) of sand, silt and clay size particles in a sample of soil.

STRUCTURE: how soil particles are arranged.



Create Healthy Soil - add Organic Matter!

- ✓ Living organisms break down the soil's existing minerals & nutrients – making them available to plants
- ✓ Compost helps retain water, suppress weeds and reduces erosion
- ✓ Organic matter balances soil structure:
 - helps clay soils soak up water
 - helps sandy soils retain water
 - adds nutrients to soil



Protect Your Soil - Erosion Prevention

- ✓ Do your project a little bit at a time



- ✓ Cover planting beds with mulch top dressings



- ✓ Plant slopes with a mixture of species. A variety of complex root systems hold soil in place.



Water Conservation

- ✓ Plan ahead
 - Learn the micro-climates in your yard. Select & place plants accordingly.
 - Add organic matter to increase infiltration and water holding capacity
 - Understand your soil type to know which irrigation method, frequency & duration are best.



Water Wise Tips

- ✓ Right plant, right place – grouping plants with similar water needs together
- ✓ Time watering to reduce evaporation
 - Cool temperature + still air = low evaporation
 - Be aware of moisture / mold relationship



✓ Drip / Soaker hoses deliver water right to the root system (= minimal evaporation)



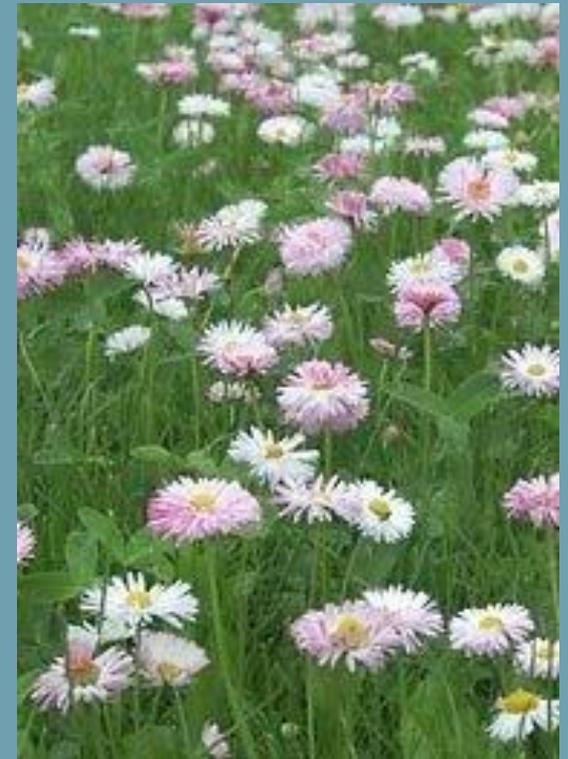
- ✓ Maintain for water efficiency:
- Plant densely, prune and weed regularly
 - Use mulch to discourage weeds & retain moisture
 - Check drip system for proper function and coverage



✓ Allow lawn to go dormant during dry months

✓ Plant drought tolerant/native plants and lawn mixes

✓ Remove your lawn!



Lawn Removal



- Cut a small v-shaped trench along new bed lines
- Place 10-15 sheets newspaper (overlapping edges) over area you wish to remove
- Wet paper thoroughly
- Place 3-6 inches of organic material on top



Pest Management *and alternatives to chemicals*



Be willing to tolerate and accept imperfections!

Remember, small populations of some pests help build populations of the beneficial insects that eat them.



3 Steps to Solve Pest & Disease Problems

1. Prevention

- Soil Preparation - encourages strong plants that ward off pests & diseases
- Mulch - suppresses weeds and helps to retain moisture
- Wise Plant Choices - right plant, right place & companion planting
- Be water wise!



2. Identify the Problem

- Positively identify the pest.
- Contact Master Gardeners, Metro, or a local natural garden store for help with identification



- Learn its life cycle. This helps in finding out best control method for that species.

3. Controls – Always try safest method first

A) Mechanical

- Use barriers, traps, hose spray or remove by hand



B) Biological

- Encourage natural predators such as nematodes and beneficial insects (ladybugs eat aphids), spiders, bats, dragonflies & birds.



3. Controls – Always try safest method first

C) Chemical

- Use only as a last resort! Start by choosing an organic product best for the identified problem:
 - Understand the pest/disease life cycle and apply product at the right time
 - Read label and follow directions exactly
 - Apply carefully and judiciously

Note: Just because a product may be labeled “organic” doesn’t necessarily mean “safe”. Products can still be harmful if directions are not precisely followed.



Quick Break

Part 3:

Plant Selection Tips

&

Summary: Design Principles
in the Landscape

Plant Selection Tips

Trees in the Landscape











Invasive Plants

English Ivy

Hedera helix

- Spreads both vegetatively (sprouts from stumps, roots, leaves), also by birds spreading seeds
- Cut from base of trees and dig out roots, or cut flowers to prevent fruiting



Herb Robert

Geranium robertianum

- Spreads entirely by seeds that are capable of being ejected 15-20 feet
- Hand pull before it flowers and seeds
- ★ *Be sure not to confuse it with Bleeding Heart – a local native with similar foliage but a different flower*



Butterfly Bush

Buddleia davidii

- Spreads primarily by prolific seeding
- Cut back repeatedly
- Hand pick seedlings and establish a ground cover (*Binggeli 1998*)
- ★ *It may be possible to dig plants up, but disturbance encourages seedling growth and should be avoided if possible.*



Tree of Heaven

Ailanthus altissima

- Spreads vegetatively (sprouts from stumps, roots, leaves), also through prolific seeding
- Small plants should be pulled once large enough to grasp, & before they produce seeds
- Larger trees should be cut and entire rootstock removed



Pokeweed

Phytolacca americana

- Spreads by seed – birds eat berries and deposit
- Pull up young shoots making sure to get the tap root
- Cut before it flowers and produces seed
- Dig out very large taproot to eliminate



Japanese Knotweed

Polygonum cuspidatum

- Spreads vegetatively when root fragments are transported to new locations
- Cut back canes repeatedly throughout growing season to deplete root reserves
- Dig out **EXTENSIVE** root system only if you can make sure you remove **ALL** of the root fragments
- Package up root fragments and remove from site to dispose. **DO NOT** let fragments enter the waterway!
- ★ *Contact your county weed agency for help in controlling this extremely invasive weed.*



Garlic Mustard

Alliaria petiolata

- Cool season herb spreads by prolific seeding
- Biennial = blooms 2nd year, then comes back by seed
- Pull by hand removing all root fragments
- If large infestation, cut to ground repeatedly



Traveler's Joy

Clematis vitalba

- Spreads both vegetatively and by seeds dispersed by wind and animals
- Cut vine at base, dig out root if possible
- Vines break easily – make several small tugs to remove from plants
- Retrieve as many seeds as possible and dispose of them in trash (bagged)



Native Plants

Native plants are adapted to our soil and climate so they need little to no watering, fertilizing, or care once established.

They are also less susceptible to common garden pests and diseases, and they attract a variety of native birds & butterflies by providing food & shelter.



Oregon Iris



Douglas Fir

Choose native plants that are appropriate for your yard.

Putting the *“Right Plant in the Right Place”* is vital to the health of your plants.

All plants are suited to certain “micro-climates” :

- Some are suited for shady, well-drained conditions
- Others like it moist and sunny
- And still others like it sunny and dry



Douglas Spiraea

Summary:

**Design Principles in the
Landscape**



- Terracing with retaining walls helps to stabilize soil
- Pathways allow access; maximizing use of garden space
- Mixture of native plant communities layered throughout landscape



- Wide pathway provides easy access to & from wood stack
- Varying layers of vegetation and shade community under Cedar tree



- Combination of rocks and plants help stabilize soil.
- Water feature, multiple blooming species attract wildlife
- Layering of vegetation



- Bird houses, snags and woody debris throughout landscape provide habitat
- Variety of pathways



- Large flowerbeds with lawn as the pathway
- Layering



- Wildlife Habitat
- Pathway provides opportunity to enjoy space from many perspectives



- Multiple layers
- Variety of blooming species, feeders and bird bath attract wildlife

We value your feedback!

Please fill out the evaluation
to let us know what you think.

Thank you!



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register for additional workshops.

Presentations are available online:

WORKSHOPS AND EVENTS

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Workshop Descriptions

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List of all Events

Native Plant Sale

Naturescaped Yard Tour

Short Presentations

Upcoming Workshops

Discover ways to save time, money and energy on your property through our FREE workshops. From naturescaping to livestock management, our classes help you care for your land in ways that benefit people, water and wildlife.



If you need any special accommodations to fully participate in any of the programs or events listed below, please call (503) 222-7645. Please allow a minimum of 48 hours to arrange the accommodation.

Click on any workshop name below to register

DATE & TIME	EVENT & LOCATION	AVAILABILITY
Sat, Oct. 6 9:00 am - 11:30 am	Creating an Edible Landscape <i>Livingscape, Portland</i>	Event full, wait list available.
Sat, Dec. 8 9:00 am - 1:00 pm	Naturescaping Basics <i>Gethsemane Lutheran Church, Portland</i>	34 seats left (of 45 max)
Sun, Dec. 9 1:00 pm - 3:30 pm	Creating an Edible Landscape <i>OMSI Parker Room, Portland</i>	22 seats left (of 40 max)

Want to refresh your memory after attending a workshop?
Download a presentation from our Workshop Materials page!
These materials are supplemental. To get the most thorough and accurate information, be sure to attend a workshop!

EMSWCD Conservation Directory:



Landscaping for people, water and wildlife.

ABOUT EMSWCD	IN YOUR YARD	ON YOUR LAND	GRANTS AND COST SHARE	LAND CONSERVATION	FARM INCUBATOR	NATIVE PLANTS	WORKSHOPS AND EVENTS
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[EMSWCD](#) » Home

What is EMSWCD?



Learn more about East Multnomah Soil and Water Conservation District: who we are, where we work and what we do!

Find the services you need in our Conservation Directory!



Whether you need native plants or some design help, soil testing or weed control, chances are you'll find it in our Conservation Directory!

[Conservation Directory](#)

The East Multnomah Soil and Water Conservation District (EMSWCD) is a unit of local government serving Northwest Oregon's Multnomah County east of the Willamette River. We work entirely on a voluntary, non-regulatory basis. All of our work is geared toward keeping water clean, conserving water and keeping soil healthy!

Upcoming EMSWCD Board and Committee Meetings

The East Multnomah Soil and Water Conservation District (EMSWCD), serving all of Multnomah County East of the Willamette River, has scheduled Board meetings and Grants, Land Legacy and Personnel Committee meetings at the District Office (5211 N. Williams Ave, Portland, OR 97217) for the months of September through December 2018.

[Visit this page](#) to see a calendar of upcoming meetings.

[September 27, 2018](#)

Register for a free workshop

Our fall season of workshops is here! We offer free and practical how-to workshops at a variety of locations in collaboration with our community partners. Discover simple gardening practices that will help you create a beautiful landscape that conserves water, reduces pollution



Attend other EMSWCD Workshops!

Attracting Pollinators

Native Plants

Beneficial Insects

Creating an Edible Landscape

Rain Gardens

Invasive Urban Weeds

www.emswcd.org



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