CITY OF NEWPORT

RESOLUTION NO. 3869

A RESOLUTION ADOPTING A TREE MANUAL FOR THE CITY OF NEWPORT

WHEREAS, in 2011, the City of Newport created a program for managing the tree canopy along its streets, parks, and other public spaces in its successful pursuit of a "Tree City USA" designation from the National Arbor Day Foundation; and

WHEREAS, some elements of the program were implemented by the adoption of Ordinance No. 2031 in 2012, and Ordinance No. 2054 in 2013; and

WHEREAS, some aspects of the program were deferred until they could be further developed; and

WHEREAS, one of the charges of the Parks and Recreation Advisory Committee, as outlined in Section 2.05 of the Newport Municipal Code, is that this Committee will serve as Newport's official "Tree Board," and further that this Committee will develop and periodically update a "Tree Manual" for planting, maintaining, and removing trees in the tree canopy; and

WHEREAS, city staff has drafted a "Tree Manual" to establish criteria for the management of the city's tree canopy pursuant to Section 2.05 of the Newport Municipal Code; and

WHEREAS, Ordinance No. 2031 specifies that the "Tree Manual" be accepted and approved by City Council resolution.

THE CITY OF NEWPORT RESOLVES AS FOLLOWS:

Section 1. The City of Newport - Tree Manual is hereby adopted as Attachment A, creating criteria for the management of the city's tree canopy.

Section 2. Resolution No.3869 shall be effective immediately upon adoption by the City Council of the City of Newport.

Adopted by the Newport City Council at its meeting of September 3, 2019.

Dean H. Sawyer, Mayo

ATTEST:

Margaret M. Hawker, City Recorder

CITY OF NEWPORT - TREE MANUAL

"There is ample opportunity to "retrofit" communities with more sustainable landscapes through strategic tree planting and stewardship of existing trees. Accelerating urbanization hastens the need for landscapes that reduce stormwater runoff, conserve energy and water, sequester CO₂, attract wildlife, and provide other aesthetic, social, and economic benefits in new development." -Western Washington and Oregon Community Tree Guide: Benefits, Costs and Strategic Planting

ACCEPTABLE SPECIES AND REGULATIONS

<u>Street Trees</u> are herein defined as any tree planted by the City or authorized to be planted by another party in a Right of Way and designated as such. Street Trees do not include existing native or non-native trees or new plantings that are not authorized by the City.

<u>Public Plantings</u> are herein defined as trees, shrubs, bushes, forbs/herbs, grasses and all other woody vegetation in all areas owned by the City to which the public has free access, including public parks having individual names.

The following list constitutes the official Acceptable Street Trees for Planting List for Newport, Oregon:

TABLE 1 - ACCEPTABLE STREET TREES FOR PLANTING

SMALL TREES	MEDIUM TREES	LARGE TREES
Flowering Crabapple	European Hornbeam	Douglas-Fir (n)
Higan Cherry	Ginkgo Biloba (male cultivars only)	Grand Fir (n)
Japanese Flowering Cherry	Golden Raintree	Holly Oak*
Purpleleaf Plum	Japanese Snowbell	Japanese Black Pine*
2002	Japanese Zelkova	Pacific Madrone (n)*
	Trident Maple	
	Washington Hawthorn	

^{*}Suitable West of Highway 101, in high wind and close to the ocean; (n) denotes native species

For a list of acceptable public plantings in Newport, see **Appendix B: City of Newport Acceptable**Species for Planting.

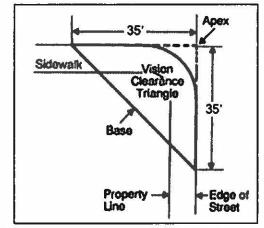
SPACING

In accordance with the three species size classes listed in Table 1, no trees should be planted closer together than the following: Small Trees, 30 feet; Medium Trees, 40 feet; and Large Trees, 50 feet; except in special plantings designed or approved by a landscape architect.

DISTANCE FROM CURB AND SIDEWALK

The distance trees may be planted from curbs or curblines and sidewalks should be in accordance with

the three species size classes listed in Table 1. No trees should be planted closer to any curb or sidewalk than the following: Small Trees, three feet; Medium Trees, four feet; and Large Trees, six feet.



DISTANCE FROM STREET CORNERS, HYDRANTS, STREET LIGHTS, SIGNS, AND VISION CLEARANCE

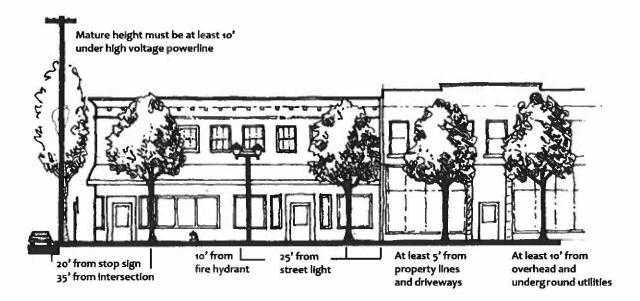
No Street Tree should be planted within the Clear Vision Area closer than 35 feet of any street corner, measured

from the point of nearest intersecting curbs, curb lines, or edge of pavement (see Figure 1). Existing trees located within a Clear Vision Area should have their branches and foliage removed to the height of eight feet above the grade. No Street Tree should be planted closer than 25 feet from any street light. No Street Tree should be planted closer than 20 feet from any stop or yield sign. No Street Tree should be planted closer than 10 feet of any fire hydrant.

UTILITIES

Figure 1. Clear Vision Area

No Street Trees other than those species listed as small trees, forbs/herbs, shrubs, and grasses in **Appendix B: City of Newport Acceptable Species for Planting** may be planted under or within 10 lateral feet of any overhead utility wire, underground water line, sewer line, transmission line or other utility.



HOW TO PLANT

Pick your site first and species second. For instance, if you have ample space, it does not make sense to plant a small ornamental tree. Likewise, if you have a narrow space with overhead utilities present, it does not make sense to plant a large conifer.

WHERE TO PLANT

Planting the right tree in the right place is essential if you want to maximize the benefits of trees and avoid future interference with foundations, sidewalks, driveways, and fences. Planting should always be done with consideration for underground and overhead utilities, street signage, street lights, driveways and other infrastructure. Call: 1-800-332-2344 (or 811) before you dig.

WHAT TO PLANT

When planting, it is essential to consider the future size of trees at maturity, rather than their size at planting. Plant tall columnar trees in narrow open spaces. Smaller rounder trees are the only ones appropriate to plant near overhead utility wires. To maximize benefits such as energy savings, overall tree canopy, and wildlife habitat, plant large trees such as Northwest natives when space is available. See **Appendix B: City of Newport Acceptable Species for Planting** for detailed information about different sizes and characteristics of climate appropriate species for planting.

MAXIMIZE THE BENEFITS OF YOUR TREE

To provide effective shading of your home, trees should be planted within 30 feet of the home, on the south and west sides. Plant at least five feet from property lines and five feet from driveways. Persistent wind comes out of the north in summer on the Oregon Coast. Strong gusty winds come out of the southwest in winter. Consider planting a windbreak, such as a row of conifers, to shield more vulnerable

trees and plantings. Take time to observe the patterns of the wind, the sun, the shade and drainage on your site before planting. Remember that trees and their roots and branches do not mix well with buildings and pavement.

ENVIRONMENTAL FACTORS

It is a good idea to think about factors such as soil, water and sunlight requirements as well as exposure to salt and wind in certain areas of Newport. In addition to **Appendix B: City of Newport Acceptable Species for Planting**, local nurseries and arborists, books, and online resources are great sources for specific tree and site-related information. There are several online references listed in Appendix A of this plan.

PROHIBITED SPECIES

The following tree species <u>are prohibited</u> from use as street trees for one or more of the following reasons: 1)their roots cause injury to sewers or pavements; 2) they are particularly subject to insects or disease; 3) they cause safety and visibility problems along streets and at intersections; 4) they create messy sidewalks and pavements.

Fruit and Nut Trees
Ailanthus (Tree of Heaven)

Aspens

Black Locust

Cottonwoods

Goldenchain

Norway Maple

Osage-Orange

Palms

Poplars

Sweetgum

Sycamore Maple

Willows

The following species <u>should not be planted and should be controlled</u> within the City of Newport due to their invasive nature:

Butterfly Bush (Buddleya davidii)

Cotoneaster (Cotoneaster franchetii, Cotoneaster lacteus)

English Hawthorn (Crataegus monogyna)

English Holly (Ilex aquifolium)

English Ivy (Hedera helix)

English Laurel (Prunus laurocerasus)

European Beachgrass (Ammophila arenaria)

Evergreen Clematis (Clematis vitalba)

False Brome (Brachypodium sylvaticum)

Field Bindweed/Morning Glory (Convolvulus arvensis)

Gorse (Ulex europaeus)
Himalayan Blackberry (Rubus armeniacus, Rubus discolor)
Irish Ivy (Hedera Hibernica)
Japanese Sedge (Carex kobomugi)
Pampas Grass (Cortaderia jubata, Cortaderia sellowana)
Portuguese Broom (Cytisus striatus)
Purple Loosestrife (Lythrum salicaria)
Scotch Broom (Cytissus scoparius)
Spurge Laurel (Daphne laureola)

GENERAL GUIDELINES

- Avoid planting trees under overhead wires and above under-ground utilities.
- Do not plant trees near building foundations or walls.
- Do not plant trees that produce nuts or large fruit in pedestrian areas.
- A tree's mature size and shape must be of the proper scale to fit the site and surrounding buildings.
- Trees have roots. Roots spread beyond the branch area of the tree. Most roots are found in the top 18" of soil; most absorbing roots are found in the top 6" of soil.
- Trees crowded in small street spaces may crack sidewalks and paved areas.
- Determine the necessary root growth space for the species you select. Think of clustering trees in a
 park setting or a parking lot to provide larger soil volumes for safe root growth. Grouping spaces as
 contiguous pits to provide shared soil volumes is recommended, rather than digging several
 individual pits. Groupings create their own small environments and may survive better.
- Identify legal restrictions for planting for both public and private property.

PLANTING A BALLED & BURLAPPED TREE

- Prior to placing it in the planting hole, while the burlap is in place, tilt the tree and prune off
 crossed/broken branches, and smaller branches that may contribute to long-term poor form. You do
 not need to "balance" the tree crown with the root loss. Keep pruning very light and minimal.
- Carefully remove any wire basket, and unwrap the tree's burlap, leaving it underneath the tree. (You
 will use the unwrapped burlap to lift and move the tree.)
- Gently remove extra soil from around the top of the root ball until you find the root flare of the highest major root. Protect the root ball from falling apart during this process.
- Dig the planting hole the same depth as the root ball but 2-3 times the width.
- Score the sides of the hole.
- Gently lift the tree using the burlap and lower it into the middle of the hole. The root flare—highest
 major root—should be level with the soil surface.
- Rock the tree gently to one side while tucking the burlap beneath the tree. Rock the tree gently to
 the opposite side, enabling you to pull out the burlap from the bottom of the hole. Support the root
 ball to keep it intact throughout the process.

- Stabilize and straighten the tree with backfill, being careful not to crack or damage the root ball.
 Double check to ensure the highest major root is even with the soil surface.
- Add the rest of the soil back into the hole, gently pressing down as you go to avoid air pockets, but not so hard as to heavily compact the soil.
- After planting, water the tree thoroughly to settle the soil and remove air pockets.

PLANTING A CONTAINERIZED TREE

- Massage the container to loosen the root ball from the pot.
- Massage the roots and loosen up the root ball soil.
- If any roots are circling, lay the root ball on its side and prune the root at the point where it begins to circle.
- Gently remove extra soil from around the top of the root ball until you find the root flare of the highest major root.
- Gently lift the tree by the root ball with a partner and lower it into the middle of the hole. The root flare—highest major root—should be level with the soil surface.
- As with all trees...
- Stabilize and straighten the tree with backfill
- After planting, water the tree thoroughly.
- If you have mulch, spread it around the base of the tree, keeping it 2-4" away from the trunk.

STAKING

Newly-planted trees do not need to be staked if they are in a safe, gust-free location. Trees should
be staked for one year only, loose enough to allow for movement in the wind, if they are in a
location where they experience gusts or constant wind or are in any other location where they could
be damaged by vehicles or pedestrians.

APPENDIX A - RESOURCES

Arbor Day Foundation - Trees

https://www.arborday.org/trees/

Friends of Trees - Browse Trees

https://friendsoftrees.org/browse-trees/

GardenSmart Oregon Guide to Non-Invasive Plants

https://www.invasive.org/gist/products/outreach/gardensmart_oregon_reduced.pdf

Great Plant Picks

http://www.greatplantpicks.org/

Missouri Botanical Garden Plant Finder

http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderSearch.aspx

Trees Are Good

https://www.treesaregood.org/

Western Washington and Oregon Community Tree Guide: Benefits, Costs and Strategic Planting [PDF]

https://www.itreetools.org/streets/resources/Streets_CTG/CUFR_164 Pacific Northwest CTG.

pdf

Appendix B: City of Newport - Acceptable Species for Planting

Common Name	Botanical Name	Native	Height / Width	Wind Tolerance	Street Tree	Water	Sun / Shade	Evergreen / Deciduous
TREES								
Large					26 1000 M 1000 T			The Friday
Sitka Spruce	Picea sitchensis	Х	150' / 30'	Н		М	Full sun	E
Grand Fir	Abies grandis	Х	100' / 20'	L	X	М	Sun/Shade	E
Coast Redwood	Sequoia sempervirens	CA Native	100' / 25'	Н		М	Full sun	E
Douglas Fir	Pseudotsuga menziesii	X	80' / 20'	L	X	M to H	Full sun	E
Norway Spruce	Picea abies		80' / 30'	Н		L	Full sun	E
Holly Oak	Quercus ilex		70' / 60'	Н	Х	M	Sun/Shade	E
Western Red Cedar	Thuja plicata	Х	70' / 25'	Н		М	Sun/Shade	E
Shore Pine	Pinus contorta	X	60' / 25'	Н		L	Full sun	E
Tuliptree	Liriodendron tulipfera		60' / 30'	L		М	Full sun	D
Western Hemlock	Tsuga heterophylla	X	60' / 20'	M		М	Sun/Shade	E
Bigleaf Maple	Acer macrophyllum	Х	50' / 30'	L		М	Sun/Shade	D
Japanese Black Pine	Pinus thunbergii		50' / 20'	Н	Х	М	Full sun	E
Pacific Madrone	Arbutus menziesii	х	50' / 30'	Н	Х	L	Full sun	E
Medium		The second second				(1-3/10)		
European Hornbeam	Carpinus betulus 'Fastigiata'		45'/20'	М	Х	М	Sun/Shade	E
Gingko	Ginkgo biloba (male cultivars only)		45' / 35'	M	Х	М	Sun/Shade	D
Japanese Zelkova	Zelkova serrata		45' / 30'	М	Х	М	Sun/Shade	D
Bitter Cherry	Prunus emarginata	Х	40' / 30'	М		М	Part shade	D
Cascara	Rhamnus purshiana	Х	40' / 12'	М		L	Sun/Shade	D
Leyland Cypress	Cupressocyparis leylandii	***	40' / 10'	Н		М	Full sun	E
Scotch Pine	Pinus sylvestris		40' / 35'	М		М	Full sun	E
Trident Maple	Acer buergerianum		35'/ 25'	М	Х	М	Full sun	D
Goldenrain Tree	Koelreuteria paniculata		30' / 30'	М	Х	L	Sun/Shade	D
Japenese Snowbell	Styrax japonica		30' / 30'	М	Х	М	Sun/Shade	D
Monterey Cypress	Cupressus macrocarpa	CA Native	30' / 8'	Н		М	Full sun	E
Strawberry Tree	Arbutus unedo		30' / 15'	М		L	Full sun	E

Common Name	Botanical Name	Native	Height / Width	Wind Tolerance	Street Tree	Water	Sun / Shade	Evergreen / Deciduous
Washington Hawthorn	Crataegus phaenopyrum		30' / 30'	М	Х	L to M	Full sun	D
Small								
Flowering Crabapple	Malus 'Liset'		25' / 20'	М	Х	М	Full sun	D
Pacific Wax Myrtle	Myrica Californica	Х	25'/20'	н		L	Full sun	Ε
Higan Cherry	Prunus subhirtella		25' / 20'	М	Х	М	Full sun	D
Purpleleaf Plum	Prunus cerasifera		25' / 20'	C	Х	М	Full sun	D
Flowering Cherry	Prunus serrulata		20' / 20'	М	Х	М	Sun/Shade	D
Japanese Maple	Acer japonicum		20' / 15'	М		М	Sun/Shade	D
Pacific Crabapple	Malus fusca	Х	20' / 20'	М		М	Full sun	D
Star Magnolia	Magnolia stellata		15' / 10'	М		М	Sun/Shade	D
Vine Maple	Acer circinatum	Х	15' / 10'	М		М	Sun/Shade	D

Common Name	Botanical Name	Native	Evergreen / Deciduous	Height / Width	Water	Sun / Shade
SHRUBS			mp little and			
Barberry	Berberis sp.		E	6' / 6'	L to M	Sun/Shade
Blackhaw Viburnum	Viburnum prunifolium		D	12' / 12'	М	Sun/Shade
Bloodtwig Dogwood	Cornus sanguinea	Х	D	6' / 6'	М	Sun/Shade
Blue Blossom	Ceanothus thyrsiflorus	X	E	5' / 5'	М	Sun/Shade
Blue Pacific Shore Juniper	Juniperus conferta		Ε	1.5' / 8'	M	Full sun
Blueberry	Vaccinium corymbosum		E	12' / 12'	M to H	Sun/Shade
Ceanothus	Ceanothus griseus horizontalis		E	3' / 8'	L	Sun/Shade
Coyote Bush	Baccharis pilularis	Х	E	4' / 10'	L to M	Sun/Shade
Creeping Juniper	Juniperus horizontalis	Northern US	E	1.5' / 8'	М	Full sun
Creeping Mahonia	Mahonia repens	Х	E	2' / 4'	М	Sun/Shade
Creeping Rosemary	Rosmarinus prostratus		E	2' / 3'	L	Full sun
Dwarf Oregon Grape	Mahonia nervosa	Х	Ε	7' / 7'	L	Part shade
Escallonia	Escallonis sp.		E	8' / 6'	М	Sun/Shade
Flowering Quince	Chaenomeles japonica		D	3' / 6'	М	Sun/Shade
Hairy Manzanita	Arctostaphylos columbiana	Х	E	10' / 10'	L	Full sun
Hawthorn	Crataegus spp.		D	30' / 30' -	L to M	Full sun
Heath (many species)	Erica sp.		E	12' / 6'	М	Sun/Shade
Hopseed	Dodonaea viscosa		Ε	12' / 8'	М	Full sun
Huckleberry	Vaccinium ovatum	Х	E	8' / 10'	L	Sun/Shade
Hybrid Rhododendron	Rhododendron sp.		E	8' / 8'	M	Part shade
Hydrangea	Hydrangea sp.		D	5' / 5'	М	Part shade
Japanese Honeysuckle	Lonicera japonica		D	30' / 6'	L to M	Sun/Shade
Japanese Umbrella Pine	Sciadopitys verticillata		E	25'/15'	М	Full sun
Kinnikinnick	Arctostaphylos uva-ursi	X	Ε	12" / 15"	L	Full sun
Lavender	Lavandula sp.		E	3' / 4'	L to M	Full sun
Lilly of the Valley	Pieris sp.		E	7' / 7'	М	Sun/Shade
Mahonia	Mahonia aquifolium	Х	E	5' / 5'	L	Part/Full Shade

Common Name	Botanical Name	Native	Evergreen / Deciduous	Height / Width	Water	Sun / Shade
Mediterranean Fan Palm	Chamaerops humilis		E	15' / 20'	М	Sun/Shade
Mexican Orange	Choysia ternata		E	8' / 8'	M	Part/Full Shade
Ninebark	Physocarpus capitatus	X	D	8' / 8'	L to M	Part/Full Shade
Nootka Rose	Rosa nutkana	Х	D	4' / 4'	L	Sun/Shade
Oceanspray	Holodiscus discolor	Х	D	10' / 8'	М	Part shade
Osoberry / Indian Plum	Oemleria cerasiformis	Х	D	15' / 10'	М	Part/Full Shade
Pacific Rhododendron	Rhododendron macrophyllum	Х	E	8' / 8'	L	Part shade
Point Reyes Ceanothus	Ceanothus gloriosus		E	6' / 6'	L to M	Sun/Shade
Prickly Currant	Ribes lacustre	Х	D	7' / 5'	Ĺ	Part/Full Shade
Pussy Willow	Salix discolor		D	15' / 12'	M to H	Sun/Shade
Red Elderberry	Sambucus racemosa	Х	D	12' / 15'	M to H	Sun/Shade
Red Flowering Currant	Ribes sanguineum	X	D	13' / 7'	L	Part shade
Rosemary	Rosemarinus sp.		Ę	6' / 4'	М	Full sun
Salal	Gaultheria shallon	X	E	6' / 8'	М	Sun/Shade
Silktassel	Garrya elliptica	CA Native	Е	12' / 8'	L	Sun/Shade
Smokebush	Cotinus coggygria		D	15' / 15'	М	Full sun
Snowberry	Symphoricarpos albus	X	D	6' / 6'	L	Sun/Shade
Spreading Gooseberry	Ribes divaricatum	X	D	10' / 3'	L	Sun/Shade
Twinberry	Lonicera involucrata	X	D	10' / 10'	М	Sun/Shade
Viburnum	Viburnum edule	X	D	5' / 5'	М	Sun/Shade
Wax Myrtle	Myrica californica	X	E	20' / 15'	L to M	Sun/Shade
Western Hazelnut	Corylus cornuta ssp. californica	X	D	4' / 8'	М	Sun/Shade
Western Serviceberry	Amelanchier alnifolia	X	D	10' / 10'	Н	Sun/Shade
Western Spirea	Spirea douglasii	Х	D	7' / 4'	M to H	Sun/Shade
FORBS/HERBS						
Ajuga	Ajuga repens			0.75' / 1'	М	Sun/Shade
Aster	Aster chilensis	Х		3' / 3'	L	Sun/Shade
Beach Aster / Fleabane	Erigeron glaucus	Х		1' / 2'	L	Sun/Shade

Common Name	Botanical Name	Native	Evergreen / Deciduous	Height / Width	Water	Sun / Shade
Beach Pea	Lathyrus japonicus				М	Full sun
Beach Strawberry	Fragaria chiloensis	Х		1' / 4'	Ĺ	Sun/Shade
Bishop's Hat	Epimedium sp.			1' / 1.5'	L to M	Part/Full Shade
Bracken Fern	Pteridium aquilinum	Х		1.5' / 2'	L	Sun/Shade
California Poppy	Eschscholzia californica	CA Native	Colors More than 1980 to China 1995 1995	2' / 2'	L	Full sun
Candy Tuft	Iberis sempervirens			1' / 1.5'	М	Full sun
Checkerbloom	Sidalcea oregana	Х		4' / 4'	M to H	Part shade
Common Camas	Camassia quamash	X		2' / 1'	M to H	Sun/Shade
Day Lily (many species)	Hemerocallis sp.			1' / 1'	М	Sun/Shade
Deer Fern	Belchnum spicant	X		3' / 2'	M to H	Part/Full Shade
Douglas Iris	Iris douglasiana	Х		2.5' / 3'	L	Sun/Shade
Dragon's Blood Sedum	Sedum spurium	Х		0.5' / 1.5'	L to M	Full sun
Drops-of-gold	Prosartes hookeri	Х		3' / 3'	M to H	Part shade
Fairy Bells	Prosartes smithii	X		3' / 3'	M to H	Full shade
Fringecup	Tellima grandiflora	Х		3' / 2'	M to H	Part/Full Shade
Fuschia	Fuchsia magellanica			2' / 2'	М	Part/Full Shade
Goat's Beard	Aruncus dioicus	AK Native		6' / 4'	M to H	Sun/Shade
Goldenrod	Solidago canadiensis	Х	Service Servic	5' / 3'	L	Full sun
Gumweed	Grindelia integrifolia	Х		1' / 1'	L to M	Full sun
Heather (many species)	Calluna sp.	Х		2' / 2'	М	Sun/Shade
Heuchera	Heuchera micrantha	Х		3' / 1'	M to H	Part/Full Shade
Ice Dance' Sedge	Carex morrowii			1.5' / 2'	M to H	Part/Full Shade
Indian Rhubarb	Darmera peltata	Х		5' / 5'	L	Part/Full Shade
Inside-Out Flower	Vancouveria hexandra	Х		1.5' / 1.5'	М	Part/Full Shade
Lady's Mantle	Alchemilla mollis				М	Sun/Shade
Large Camas	Camassia leichtlinii	X		1' / 1'	M to H	Part shade
Lenten Rose / Hellebore	Helleborus sp.	Х		1.5' / 1.5'	L	Part shade to full shade
Licorice Fern	Polypodium vulgare	Х		1' / 1'	М	Part/Full Shade

Common Name	Botanical Name	Native	Evergreen / Deciduous	Height / Width	Water	Sun / Shade
Lithodora	Lithodora diffusa			1' / 25'	М	Sun/Shade
Maiden Fern	Adiantum pedantum	Х		2.5' / 1.5'	М	Part/Full Shade
Matilija Poppy	Romneya coulteri	CA Native		10' / 20'	L	Full sun
Phlox	Phlox subulata	US Native		0.5' / 2'	М	Full sun
Piggy-Back Plant	Tolmiea menziesii	Х		0.5' / 0.5'	M to H	Part/Full Shade
Purple Leaf Winter Creeper	Euonymus fortunei			0.75' / 3'	М	Sun/Shade
Santolina	Santolina chamaecyparissus			2'/3'	L to M	Full sun
Sea Pink	Armeria maritima			1' / 1'	L	Full sun
Sea Watch	Angelica lucida	Х				
Seashore Lupine	Lupinus littoralis	Х		1' / 1'	L to M	Full sun
Shasta Daisy	Leucanthemom x superbum			4' / 4'	L to M	Full sun
Silver Lace Vine	Polygonum aubertii			25' / 25'	М	Sun/Shade
Silverweed	Potentilla anserine ssp.	Х		1'/3'	M to H	Full sun
Slough Sedge	Carex obnupta	Х	2	2' / 2'	M to H	Full shade
Snow in Summer	Cerastium tomentosum		38 (47 2.3.20)	1' / 1'	L	Full sun
Stream Violet	Viola glabella	Х		0.5' / 0.5'	М	Part shade
Sweet Woodruff	Galium odoratum			1' / 1.5'	M to H	Part/Full Shade
Sword Fern	Polystichum munitum	Х		5.5' / 3'	L to M	Full shade
Thimbleberry	Rubus parviflorus	Х	- LO SORNA RI LOGA MANOR	8' / 8'	M to H	Part shade
Trillium	Trillium ovatum	Х		2' / 1.5'	M to H	Part/Full Shade
Voilet	Viola adunca	Х		1' / 1'	M to H	Sun/Shade
Western Geranium	Geranium oreganum	Х	M	3' / 2'	М	Part shade
Wild Ginger	Asarum caudatum	Х		0.5' / 1.5'	М	Part/Full Shade
Wood Fern	Dryopteris arguta	X		2' / 2'	L	Sun/Shade
Wooly Thyme	Thymus pseudolanuginosus			0.25' / 1'	L to M	Full sun
Woundwort	Prunella vulgaris	Х		2' / 0.75'	M to H	Sun/Shade
Yarrow	Achillea millefolium	Х		3' / 1.5'	L	Sun/Shade

Common Name	Botanical Name	Native	Evergreen / Deciduous	Height / Width	Water	Sun / Shade
GRASSES						
Blue Oat Grass	Helictotrichon sempervirens			3' / 2.5'	L to M	Full sun
Blue Wild Rye	Leymus racemosus 'Glaucus'	CA Native	Last See	2' /2'	L to M	Full sun
Blue-Eyed Grass	Sisyrinchium idahoense	Х		1.5' / 1.5'	М	Full sun
Feather Reed Grass	Calamagrostis acutiflora 'Karl Forester'			5' / 2.5'	M to H	Full sun
Maiden Grass	Miscanthus sinensis 'Gracillimus'	Х	23.0 3.00	7' / 6'	М	Sun/Shade
Orgen Tufted Hair Grass	Deschampsia cespitosa	Х		3' / 3'	M to H	Sun/Shade
Variegated Japanese Silver Grass	Miscanthus sinensis 'Variegatus'			9' / 5'	М	Sun/Shade