Western Hemlock
Tsuga heterophylla
TSUHET

Needles are short, flat, blunt and are arranged in feathery flat spray (should feel soft). Needles are yellowish-green on top and are whitish with 2 fine stomata below.

You'll know it's a hemlock if it looks as though it is drooping. Douglas firs and Grand firs stand more upright and have generally tougher-feeling needles.

Western Red Cedar
Thuja plicata
THUPLI

Leaves are scale-like, closely pressed to the stem in an overlapping shingled arrangement.

Bark is grey to reddish brown and peels off in strips on mature trees.

Rocky Mountain Maple
Acer glabrum
ACEGLA

Leaves are 3-5 lobed and coarsely toothed.

On young shoots, the leaves may be fully divided into three parts rather than simply lobed.

Twigs are a reddish grey color.

Bigleaf Maple
Acer macrophyllum
ACEMAC

Opposite leaving structure.

Deeply 5 lobed.

Young bark is green and smooth.

Unlike Rocky Mountain Maple, it is not toothed (even when young).

Douglas Fir
Psuedotsuga menziesii
PSEMEM

Needles are spirally arranged around the whole branch.

Needles are flat and yellowish-green (with 2 white bands of stomata on underside), have pointed tips.

Cones look as if it has little mouse tails peeking out of it (3 bracts that extend beyond scales).

Western White Pine
Pinus monticola
PINMON

Needles are in bundles of 5.

Needles are blue-ish green, slender and flexible, and 5-10 cm long (much longer than the other conifer species in the reservoir).
Leaves are lance shaped, tapering to a long tip, margins are finely toothed. Young leaves are densely hairy, but older leaves are not hairy and whitish underneath.

Prominent kidney shaped stipules (wart like glands near the leaf base)

Twigs are usually hairless and brittle at the base.

More tolerant in dry spots on terraces than the Sitka Willow

Leaves are blue-green to silver and very hairy when young

With age, the leaves get more smooth

Leaves are pointed or round at the tip

More tolerant in dry spots on terraces than the Sitka Willow

Leaves are alternate, broad and widest above the middle

Leaves are dark green with underside that is hairy, but not reflective like the Sitka

Bark is dark brown and gray and does not have lenticels

Leaves are more finely toothed than Alnus rubra and lack the rolled-under edge that is characteristic of Alnus rubra leaves

Leaves also feel less substantial/thinner

Leaves are shiny and slightly sticky beneath
Leaves are alternate, broadly oval, and pointed at the tip and base. Leaf margins are wavy and irregularly toothed.

Underside of leaf looks like the leaf’s edge is slightly rolled over.

In summer, alder leaves may be sticky on the top surface.

Red Alder
Alnus rubra
ALNRUB

Bark is dark grey with white spots (lenticels).

Hairless leaves, shiny dark green above, underside whitish with rusty specks.

No stipules.

Many black cottonwood leaves also have an engorged yellow spots from fungus.

Black Cottonwood
Populus balsamifera
POPBAL

Opposite, oval leaves, mostly sharp pointed.

Many stems and opposite branches.

Bright red stem.

5-7 parallel veins on leaf that converge at the tip.

Red Osier Dogwood
Cornus sericea
CORSER

Leaves are irregularly lobed, generally are oval at the base with a pointed tip and finely toothed margins.

Dark green leaves and paler underneath.

Twigs and branches sometimes look like they have thorns, but these are the places where fruits/flowers are produced.

Pacific Crab Apple
Malus fusca
MALFUS

Branches grow from central root system.

Brighter green leaves in an alternate pattern that are not toothed, have cucumber smell when crushed.

Flowers in clusters, fruits are small and hard, dark purple.

Indian Plum
Oemleria cerasiformis
OEMCER

Oval shaped leaves in alternate pattern, leathery and shiny above with whitish-green surface below.

Leaves do not have teeth except when young.

Young bark is soft yellowish beige and older bark is dark brownish red (maroon) and looks as if it is peeling off.

Pacific Madrone
Arbutus menziesii
ARBMEN
**Hardhack, Spiraea**
Spiraea douglasii  
**SPIDOU**
Alternate leaves, oval shaped and toothed above the middle  
Dark green leaves and sometimes woolly-grey underneath  
Young growth is a red-dish-brown color  
Flowers are clustered and pink

**Saskatoon**
Amelanchier alnifolia  
AMEALN
Dark grey to reddish bark  
Leaves are alternate, thin, and round to oval shaped  
Leaves tend to be toothed in the upper third/top half

**Redstem Ceanothus**
Ceanothus sanguineus  
CEASAN
Alternate leaves, oval, 3-10 cm, finely toothed  
Smooth, reddish-purple stalks and bark  
3 main veins from base of leaf

**Twinberry**
Lonicera involucrata  
LONINV
Alternate leaves, oval shaped and toothed above the middle  
Dark green leaves and sometimes woolly-grey underneath  
Young growth is a red-dish-brown color  
Flowers are clustered and pink

**Black Hawthorn**
Crataegus douglasii  
CRADOU
Thorned grey bark that is rough and scaly  
Top end of leaf has 5-9 lobes  
Alternate leaf structure

**Bitter Cherry**
Prunus emarginata  
PRUEMA
Reddish-purple bark on younger stems  
Finely toothed leaves 1-3 inches long, rounded at the tip  
Multi-stemmed  
Pair of glands at the base of the leaf

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Finely toothed leaves 1-3 inches long, rounded at the tip  
Multi-stemmed  
Pair of glands at the base of the leaf
Stressed leaves can be red, yellow, or orange colored
Densely packed leaves, alternate, dull green, hairy, broadly egg shaped to triangular. Lobed or coarsely toothed
Leaves have variation but retain unique general shape of deep lobes

Ocean Spray
Holodiscus discolor
HOLDIS

Opposite leaves, wide ovals
Distinguishable by 3 well-defined veins from leaf base underneath
Short-stalked leaves
Flowers are aromatic when trees are large

Mock Orange
Philadelphus lewisii
PHILEW

Leaves are alternate, leathery, thick, egg shaped, sharply and finely toothed
Leaves are evergreen, 5-10 cm long
Hairy branched stems
Reddish-blue “berries”

Pacific Ninebark
Physocarpus capitatus
PHYCAP

Leaves alternate on the branches
Lobes of leaves are toothed and deeply veined
Leaves are shiny green with hairs underneath
Brown, shredding bark

Salal
Gaultheria shallon
GAUSHA

Leaves are alternate, leathery, thick, egg shaped, sharply and finely toothed
Leaves are evergreen, 5-10 cm long
Hairy branched stems

Silver-gray bark
Shiny green leaves clustered near the end of twigs, egg shaped to oblong
Veins indent the leaves, making them wavy (feels like a washboard)

Cascara
Rhamus purshiana
RHAPUR

Pink-red flexible stalk
Stems of the Leaves wrap around the main stalk
Smells like minty pine-sol (can be made into a tea that tastes just like it smells)

Yerba buena
Satureja douglasii
SATDOU

Sometimes reddish young stalks
Leaves sometimes slightly shiny on top
Opposite leaves that are incredibly variable in shape: can be elliptical to oval with margins that are smooth to wavy-toothed

Erect, hairless branches

Twigs are very fine

Pink and white flowers, white berries

**Common Snowberry**

Symphoricarpos albus

SYMALB

Large prickles at the base of each leaf

Alternate, compound, toothed leaflets (5-7 leaves/leaflet)

Leaves have more or less rounded tips

**Nootka Rose**

Rosa nutkana

ROSNUT

Numerous soft, straight prickles covering stems

Distinguishable from Nootka rose by dense prickles on stem

Alternate, compound, toothed leaflets (5-9 leaves/leaflet)

**Baldhip Rose**

Rosa gymnocarpa

ROSGYM

Trailing stem along ground, sometimes white/green/purple with curved prickles

Leaves are alternate with 3 leaflets 3-7 cm long

Leaflets are 3 lobed, dark green and toothed

Flowers are white to pink, fruits are black berries

**Trailing Blackberry**

Rubus ursinus

RUBURS

Alternate leaves

Trifoliate to 5-foliate

Leaflets toothed and covered with white hairs below leaf

Stout, recurved prickles

White to pink flowers

**Himalayan Blackberry**

Rubus armeniacus

RUBARM

3 (sometimes 5) egg shaped, crinkly, sharp-toothed leaflets with shiny white undersides

Erect, arching stems with a whitish hue, curved but flattened prickles

Berries are dark purple/black raspberries

**Blackcap Raspberry**

Rubus leucodermis

RUBLEU
Thimbleberry
Rubus parviflorus
RUBPAR

Erect, unarmed stems (young stems can have glandular hairs)
Leaves are LARGE, soft, maple-leaf shaped, 3-7 lobed, and fuzzy on both sides
Red berries that resemble raspberries
Form dense thickets

Salmonberry
Rubus spectabilis
RUBSPE

3 leaflets that are sharply toothed (the two bottom leaflets look like butterflies)
Erect, with scattered prickles (does not have as defined thorns as Rubus ursinus or Rubus leucodermis)
Bark is golden brown and looks shredded
Berries are orange/red

Red Flowering Currant
Ribes sanguineum
RIBSAN

Erect, unarmed, reddish brown bark
Young growth stem is finely hairy
Alternate, 5-lobed leaves
Blue/purple berry
Leaves have toothed margins, with the upper side of the leaf dark green and glossy (not hairy)
Distinguishable from the other gooseberries by its lack of spines/thorns

Black Gooseberry
Ribes lacustre
RIBLAC

Large thick spines at leaf nodes, hairy thorns on stalk
Bristly, purple berries
Alternate leaves, most with 5 deeply indented lobes

Wild Gooseberry
Ribes divaricatum
RIBDIV

1-3 spines only where leaves are attached
Smooth berries
Leaves are alternate and somewhat maple shaped, with a heart shaped base, and toothed margins

***
This guide was created in the summer of 2017 by Lydia Petroske and Olivia Won using Illustrator and InDesign. The information and drawings included in this guide are based on their experience doing plant transects in the Mills reservoir, supplemented with notes from Plants of the Pacific Northwest Coast by Pojar and Mackinnon.