## 5-5-2021 Draft 2 -4 pages

## Scott School Sidewalk Native Plant Gardens Concept and Maintenance Protocol

## Concept - Why local native plants?

Born in 2013 with the idea to replace a considerable amount of concrete sidewalk along Scott School's Minnesota and Tennessee streets, each with 200 feet of native habitat for local birds, bees, butterflies and other insects so these creatures can survive and thrive in our neighborhood, now an urban environment, and so people can learn about and enjoy our native plants and the creatures that evolved with them in this place we now all inhabit.

Even in their natural environment native plants grow slowly taking advantage of climate, weather and soil conditions. We can do best with native plants by trying to mimic and enhance their natural habitat and requirements. Once established local native plants need little maintenance because they are adapted to our climate of wet winters and dry summers. Native birds depend on native plants to provide food, either directly or by providing conditions and habitat for the food they require—flowers, berries, seeds and insects. Insects and especially caterpillars/larvae are necessary for the birds to feed to their young nestlings. Similarly, our native bees, butterflies and other insects need the historic natural habitat in which they evolved so they can survive and thrive.

#### Maintenance and Care

Gardens generally get watered 1x/week and maintained 2x/week but may not need watering in rainy season and may require a second watering within a week in the hot dry months. Weekly monitoring/decision needed. Plants sourced from local Native Plant nursery, Mission Blue Nursery, which collects local seeds and propagates for plant sales. More about all garden plants here: https://www.mountainwatch.org/mbn-menu

Note: Mission Blue Nursery Plant List (planted 1/9 and 1/30, 2021) attached\*

## November - January (+February if need to, but plants have less time to form roots)

- Planting season to take advantage of rains, root growth period before plants start to send out above-ground shoots, leaves and buds. Best to start right after rains begin.
- Plant new plants if needed- 1 Gallon container size works best to let plants establish good root system in more shallow soil. Add organic compost with new plant. NOTE: best to keep plant base 12-18" from edge of planter so plant can fill out and so dog pee does not reach plant base.

We have found that sturdy spreading woody plants like the prostrate Baccharis (Coyote Brush) and Ceanothus (bush and low-spreading local species) do well on areas closest to foot traffic. Add more delicate and re-seeding annual plants to the protected middle. Small boulders on vulnerable side of new plants also help protect them.

- Also time to break apart and spread those plants that can be propagated that way. Form soil moat around new plant bases if possible to keep water going to roots. Rebuild moats around existing plants if needed.
- Add some organic compost or soli mix and mulch over open soil areas to keep moisture in ground before natural mulch builds up. See soil and mulch in Gardens Materials list.
- Gardens should not need much watering but plants need to be monitored in case of little rain.
- Weed if needed, remove fallen leaves that cover plants but leave natural mulch to form on soil.

#### February - March

• Monitor new and existing plants for water needs, weed, remove fallen tree leaves that cover plants but leave natural mulch to form on soil around plants.

#### April – May

- Water needs increase with less rain, longer days, more sun and wind. Monitor new and existing plants for water needs, weed, remove fallen tree leaves that cover plants but leave natural mulch to form on soil around plants.
- If cut back spent stems, cut up and add to mulch. Avoid deadheading flowers until seeds are ready to reseed. If/when remove flower heads/seeds/stems –drop them onto soil/mulched areas so they can re-seed or become part of natural mulch. continued

#### June - July

- Water needs increase with less rain, longer days, more sun. Monitor new and existing plants for water needs, weed, remove fallen tree leaves that cover plants, leave natural mulch to form on soil around plants.
- If cut back spent stems, cut up and add to mulch. Avoid deadheading flowers until seeds are ready to reseed. If/when remove flower heads/seeds/stems –drop them onto soil/mulched areas so they can re-seed or become part of natural mulch.
- Can augment soil areas with organic soil with mulch as a top dressing for keeping water from evaporating if not enough natural mulch has formed yet. Keep 8" mulch-free diameter around plant stem base to keep plants from getting too much moisture or mildew, and 3-6" away from ground cover which send out surface rooting or underground spreaders.

## August - September - October

- Monitor and maintain water needs. Most native plants do well with little water as they mature (takes 1-3 years, as they would in natural environment) but with shallow soil, more water may be needed. Should need less weeding. Continue to remove fallen tree leaves that cover plants but leave natural mulch to form on soil around plants.
- Since this is mostly a quiet, dormant time for many native plants it can be a good time to do maintenance projects that would disturb plants during their growth period (Jan.-June)
- Monitor mulch cover and add some organic mulch if needed.

Note: avoid using blower in planting beds in dry months if possible.

**Note:** watering: to get slower infiltration, less runoff: Fill 1 gallon buckets with holes in bottom (or milk jugs with tops cut off in holes adjacent to plants) at start of maintenance period. Allow water to soak in while tending to other business. Move around as needed.

## **Projects To Complete Now as GBD Budget allows:**

- **1. Garden Signs:** Need to double-side all signs with "Native Plants Live Here" and "No Dog Pee Please" in all garden beds except smallest one (southernmost bed on Tenn side).
- -- Sign posts: Top to be approx. 24" from ground level.
- -- Review sign positions with steward Janet C. and move away from middle of bed. Place in aesthetically pleasing position in each garden bed so garden is not overwhelmed by signs. Janet C. can flag positions for discussion.
- --See Garden Signs list under Garden Materials for quantities needed.
- --GBD has source for "No dog pee" signs. Need to order more. If these same signs not available see Garden Signs list under Garden Materials for sources and quantities needed.
- **2. Install GBD small signs:** one each at North end facing north, and at South end facing south of Tennessee St. and Minnesota St. gardens = 4 signs.
- **3. Plant protection:** Janet C. /Terri M. reviewed trouble spots and recommend placing a few strategic boulders closer to sidewalk to protect plants in specific spots. Wait to plant new plants until November. Fill in any "bare" soil spaces with 2" soil plus light dressing of organic mulch until planting time. Place rustic rails, rustic willow edging borders or driftwood along non-fenced edges where needed to indicate barrier between sidewalk and planted beds. GBD/Lianez to estimate labor cost for making and installing barriers based on those already done on Tennessee St. but materials may be different. Janet C. is researching sources for rails in case no free-standing driftwood available.
- -- Try a few pre-made rustic sectional willow edging borders where needed on Minn. St. See how they work. See Garden Barriers/Borders list under Garden Materials. First choice: style: WE-45, Weaving willow edging.
- **3. Tennessee St. sidewalk replacement:** DPW should complete replacement where temporary asphalt was placed after pipe broke in school last year near southern end of school.

continued

#### 4. Brick garden edging to fix: GBD

- Tenneessee Side- northernmost bed, street side tree root is pushing up brick near tree base. Remove bricks and replace with soil areas where roots are pushing up bricks.
- Minnesota St side- north-western corner of bed at school driveway- a few end bricks have been damaged, need replacing into sand base.
- **5. Brick walk-through on south end in front of kids school Tennessee St side:** According to principal Monica Leicht and parent/DNA VP Donovan Lacey, school is having parents pick up/drop off kids on Minnesota St. side now so issue to be revisited if still a need to widen. Janet C. will follow up with Monica.

**GBD:** Lainez to make additional signs/posts to match existing ones but to be two sided, all to be same height at approximately 24" to top of post from ground level. Janet C. can work with Terri M. along with Juan L. for sign and boulder placement. Janet can flag the gardens for placement and meet with Juan (and possibly Terri) at gardens. Terri and Janet toured/discussed the gardens on 1-19-21. Kim, Cory, Terri and Janet met to discuss gardens on 3-25-2021 and recommended this Care and Maintenance Document be established. GBD to pay for labor.

**Steward:** Janet Carpinelli -GreenTrustSF-Janet Carpinelli/Sarah Skaggs/Ralph Wilson-Steering Committee, with fiscal sponsor San Francisco Parks Alliance to pay for and order supplies and materials—plants, boulders, soil, mulch, signs, barrier materials. **52 new native plants were planted by stewards and volunteers on 1-9-21 and 1-30-21.** Plants are doing well. See plant list attached, paid for by GTSF.

## Garden materials List:

Minn. St side gardens = 650 sq ft total, and need soil and mulch for 225 sq feet area Tenn. St side gardens = 725 sq ft total, and need soil and mulch for 225 sq feet area

Soil: = need 3 (yd3) at 2" deep

- 1. Essential Soil: \$5.00 /sk or \$99.00 /yd
- -- Essential Soil is an all-natural mix that is engineered to resist compaction, has excellent water penetration, good aeration, and will support rapid root growth. Essential Soil is recommended for raised planter beds and will support excellent root growth. An ideal soil for vegetables and fruit trees.
- -- Essential Soil is comprised of the following: ¼"-Pea Gravel which is an inorganic mineral component for drainage and aeration; Compost provides organic matter and soluble nutrients; ¼-Fir Bark is a wood amendment acts as carbon matter; Coarse Sand is an inorganic mineral component; Bio-Nutrient Package provides soil microbiology.

Or

- 2. Landscape Mix: \$3.25 /sk \$62.00 /yd
- -- (formerly "Nursery Mix") is an all-purpose soil mix for outdoor use. It contains Sandy Loam, Redwood Sawdust, Organic Garden Compost, and Organic Crustacean Meal. You can spread it out over an existing soil and turn it under wherever you need to raise the grade and improve your soil.

Or

- 3. Organic Amendment Mix: \$3.00 /sk \$41.50 /yd
- -- A blend of Organic Green Waste Garden Compost, Redwood Sawdust, and Organic Feather Meal. This mix is generally used for improving most soils in water retention and aeration. Amendment Mix helps to open up clay for rainwater to be held and to be moved through the soil. Excellent for generic all-purpose soil amending.

**Mulch:** = need 3 (yd $^3$ ) at 2" deep = \$108.

#### 1.Premium Arbor Mulch:

\$2.50 /sack, or \$36.00 /yd, plus delivery, or can PU. Will fill truck for fee. One cubic foot sacks: "we supply the bags and you fill them"

continued

## **Boulders: samples:**

- 1. Sonoma Field Stone Boulders: \$230./ton
- -- Origin: North America, Classification: Rhyolite, Color Range: Oranges, Browns, Grays Finish: Natural, Application: Accents
- -- Sonoma Field Stone Boulders are weathered rhyolite. They range in size from 200 pounds to 3,000 pounds, larger sizes can be special ordered. The root side, the side that was buried in the ground, is a bright orange color. The weathered side is a dark brown to charcoal gray and generally covered with moss and lichen.
- -- Sonoma Field Stone Boulders may qualify for LEED Local/Regional Materials credit.

Or

- 2. South Bay Quartzite Boulders: \$615./ton.
- -- Origin: North America, Classification: Quartzite, Color Range: Tans, Whites, Browns Finish: Natural, Application: Accents
- -- South Bay Quartzite Boulders are decorative angular quartzitic sandstone boulders. Primarily tan with a blend of white, blue, amber, light and dark brown.

Source: Lyngso: 345 Shoreway Road, San Carlos, CA 94070, 650.364.1730 https://store.lyngsogarden.com/departments/composts--mulches--soils---amendments-3.html

Garden Signs: 2 sided/2 signs: 12 beds total x 2 = 24 signs plus 2 extra of each = 26 each of:

- -- Top--A. "Native Plants Live Here" 6.75"w x 9" tall (have 7 1-sided signs plus 10 loose signs) --need 9 additional @ \$12.per https://store.cnps.org/collections/cnps-merchandise/Merchandise
- -- Bottom--B. **need 26-** (have 7 1-sided signs) --**need 19 additional** (See GBD/Julie C. for previous source of signs)

Or

"No Dog Pee Please" 9"w x 3" tall -alternate every other post with "Dog urine kills plants" -- https://www.mydoorsign.com/customize-no-dogs-rules-sign/sku-se-3922?engine=googlebase&keyword=&skuid=SE-3922-MU-SHOW-3x10&gclid=EAlalQobChMlvL-7-eOs8AlV2gutBh2NhwFpEAQYAyABEgKI7\_D\_BwE \$15. Per

https://www.amazon.com/Kichwit-Respectful-Construction-Measures-Included/dp/B07SYZDGKC/ref=sr\_1\_3\_sspa?dchild=1&keywords=no+peeing+dog+sign&qid=1620020473&sr=8-3spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUEzQk5BN09MUElwUURTJmVuY3J5cHRIZElkPUEwNTcwMzMwMjFht \$15. per

#### Garden barriers/borders:

- -- Tennessee St. side: Already done in a previous year project. Material: 2" wood tree stakes
- -- Minnesota St. side: Free-standing driftwood, sectional willow borders (try a few sections now), or rustic rails where needed –TBD

Source: for sectional willow borders:

https://www.mastergardenproducts.com/willow\_edging.htm See style: WE-45, Weaving willow edging.

\*Attachment: January 2021 Planted list from Mission Blue Nursery

End



## 3435 Bayshore Blvd, Brisbane, CA 94005 nursery@mountainwatch.org (415) 467 6631

Date	12/15/20	Customer	GreenTrustSF
Invoice #	207	Contact	Janet Carpinelli, jc@jcarpinelli.con

SALESPERSON	PICK UP APPOINTMENT	PAYMENT
Ariel Cherbowsky Corkidi, Director	December 2020	Please write a check to the order of "San Bruno Mountain Watch" and send to PO Box 53, Brisbane, CA 94005

ITEM	CODE	SIZE	ОТУ	PRICE	LINE TOTAL
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California Mugwort (Artemisia douglasiana) *super sale price*	ArtDo	1G	2	\$ 7.00	\$ 14.00
Yerba Buena (Clinopodium douglasii) *sale price*	CliDo	1G	4	\$ 9.00	\$ 36.00
Woodland Strawberry (Fragaria vesca) *sale price*	FraVe	1G	3	\$ 9.00	\$ 27.00
Pacific Ninebark (Physocarpus capitatus) *super sale price*	PhyCa	1G	6	\$ 7.00	\$ 42.00
Alum Root (Heuchera micrantha) *standard price*	HeuMi	1G	5	\$ 12.00	\$ 60.00
Pacific Stonecrop (Sedum spathulifolium) *standard price*	SedSp	1G	6	\$ 12.00	\$ 72.00
Pink Flowering Currant (Ribes sanguineum var. glutinosum) *standard price*	RibSaGl	1G	3	\$ 12.00	\$ 36.00
Bearberry Manzanita (Arctostaphylos uva-ursi) *sale price*	ArcUv	1G	3	\$ 9.00	\$ 27.00
Prostrate Coyote Brush (Baccharis pilularis ssp. pilularis) *super sale price*	BacPiPi	1G	2	\$ 7.00	\$ 14.00
Soap Root (Chlorogalum pomeridianum) *standard price*	ChIPo	1G	2	\$ 12.00	\$ 24.00
Bluff Lettuce (Dudleya farinosa) *standard price*	DudFa	1G	2	\$ 12.00	\$ 24.00
California Fuchsia (Epilobium canum) *super sale price*	EpiCa	1G	2	\$ 7.00	\$ 14.00
Seaside Woolly Sunflower/Lizard tail (Eriophyllum staechadifolium) *sale price*	EriSt	1G	1	\$ 9.00	\$ 9.00
California Fescue (Festuca californica) *super sale price*	FesCa	1G	4	\$ 7.00	\$ 28.00
Seep Monkey Flower (Mimulus guttatus) *super sale price*	MimGu	1G	2	\$ 7.00	\$ 14.00
California Phacelia (Phacelia californica) *super sale price*	PhaCa	1G	2	\$ 7.00	\$ 14.00
California Buttercup (Ranunculus californicus) *sale price*	RanCa	1G	2	\$ 9.00	\$ 18.00
Bluewitch Nightshade (Solanum umbelliferum) *super sale price*	SolUm	1G	1	\$ 7.00	\$ 7.00
California Goldenrod (Solidago velutina ssp. californica) *standard price*	SolVeCa	1G	3	\$ 12.00	\$ 36.00
				SUBTOTAL	\$ 516.00
	\$ 47.73				
	\$ 563.73				

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Our tax-ID number is 94-3235791

We are grateful for your business!

Your purchase supports ecological restoration and environmental education programs on San Bruno Mountain



# 3435 Bayshore Blvd, Brisbane, CA 94005 nursery@mountainwatch.org (415) 467 6631

Date	2/11/21	Customer	GreenTrustSF
Invoice #	224	Contact	Janet Carpinelli, jc@jcarpinelli.com

SALESPERSON	PICK UP APPOINTMENT	PAYMENT
Ariel Cherbowsky Corkidi, Director	lanuary 29th 2021	Please write a check to the order of "San Bruno Mountain Watch" and send to PO Box 53, Brisbane, CA 94005

ITEM	CODE	SIZE	QTY		PRICE	LINE TOTAL	
Bearberry Manzanita (Arctostaphylos uva-ursi) *sale price*	ArcUv	1G	2	\$	9.00	\$ 18.0	0
SUBTOTAL						\$ 18.0	0
9.25% BRISBANE SALES TAX			\$ 1.6	67			
TOTAL					\$ 19.6	7	

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