



**PORTLAND
BOTANICAL
Gardens**

A Botanical Garden by the River

PBG Introduction

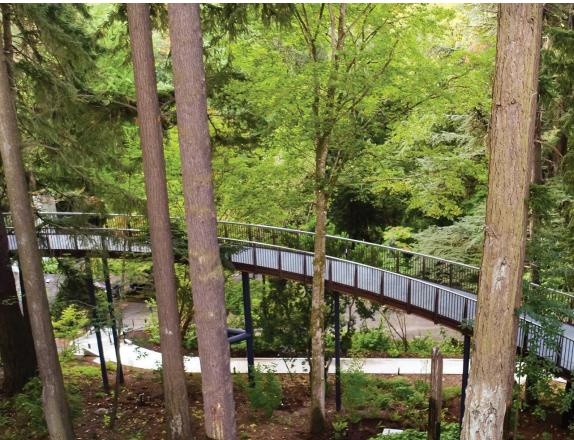
Matthew Taylor

City of Gardens



Portland boasts world renowned gardens - Portland Japanese Garden, Lan Su Chinese Garden, International Rose Test Garden, Hoyt Arboretum, Leach Botanical Garden, and others.

But over the years many people wondered why Portland does not have its own central and general public botanical garden, much like many other major cities in the country.



About PBG



*Established in 2019 and
incorporated as a nonprofit in 2020.*

*Mission: Bring plants and people
together and provide an immersive
space for knowledge, community,
and collaboration.*



DECEMBER 2019

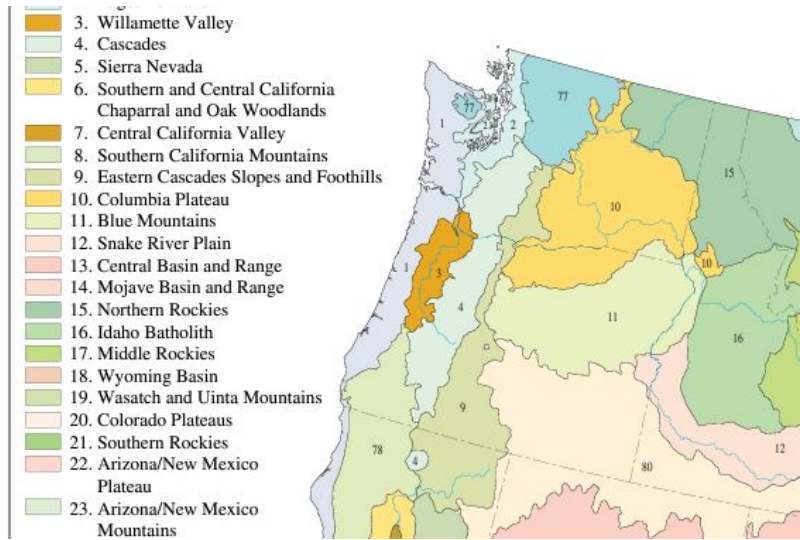
MAY 2020

NOW

Vision for the Garden



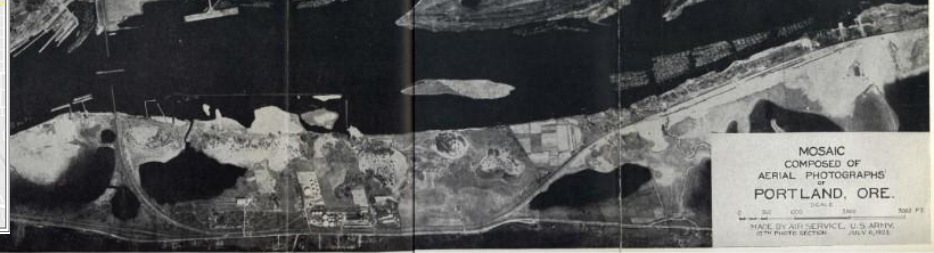
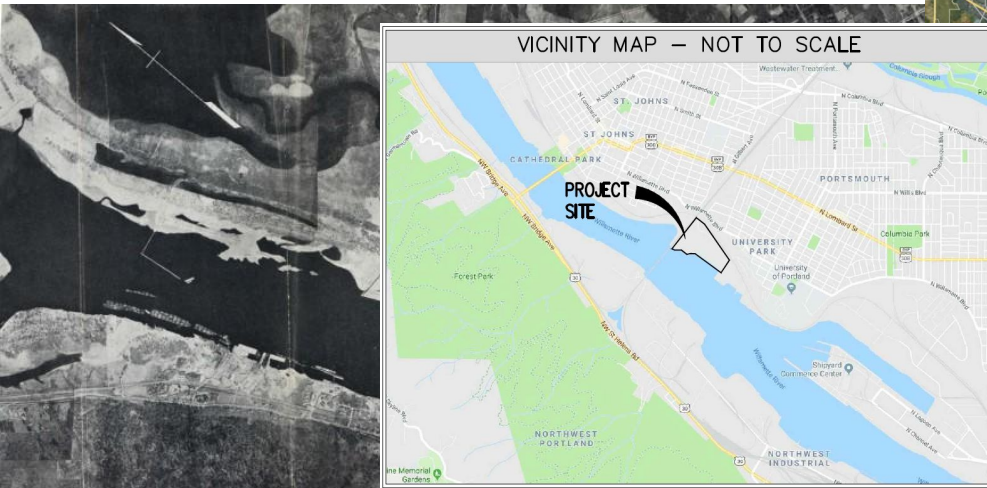
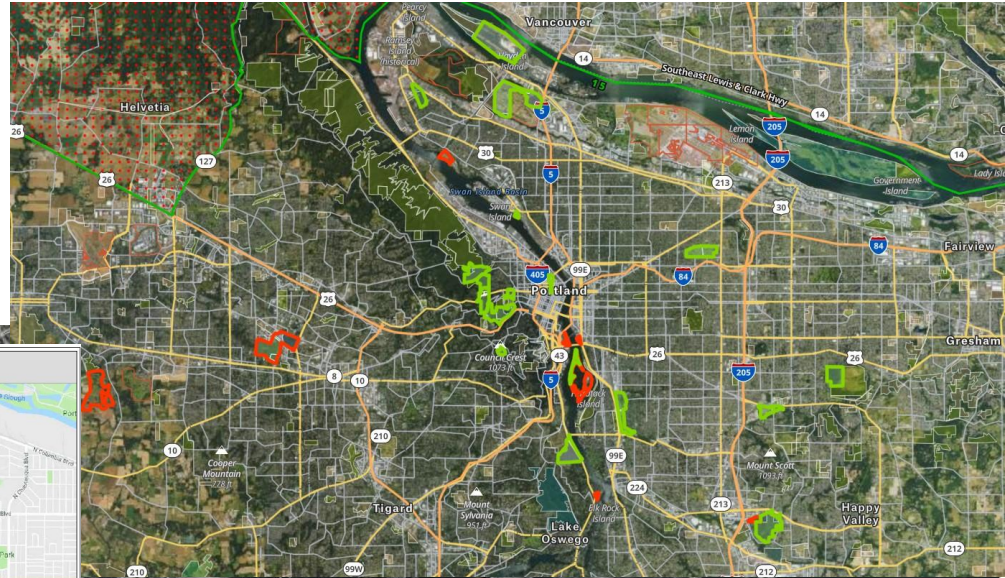
Create a preeminent public garden with Oregon's first conservatory, the state's largest collection of native plants, and its most comprehensive vocational & research program in climate resilience, plant habitats and appropriate horticulture, all within a living laboratory.



Where to Grow a Garden?



PBG began its search for a garden location in 2020. The McCormick & Baxter site, a 59-acre riverfront property, was identified as a prime location due to its size, cleanup efforts, and proximity to the city center.



MOSAIC
COMPOSED OF
AERIAL PHOTOGRAPHS
PORTLAND, ORE.
SCALE BY AIR SERVICE, U.S. ARMY
8TH PHOTO SECTION, JULY 1960

Why McCormick & Baxter?



The McCormick & Baxter site is a reclaimed Superfund site, with 42 acres of upland, 18 acres of submerged lands, and a 1/3 mile of riverfront.

It provides a unique opportunity to establish a botanical garden while highlighting environmental healing and protecting public access to the river.



A Garden by the River



The McCormick & Baxter site provides views of the Willamette River, Forest Park, the historic BNSF railroad bridge, and basalt bluffs to the east.

The site's mature trees, riparian forest, and native woody plants and forbs offer a rich base for establishing a public botanical garden.



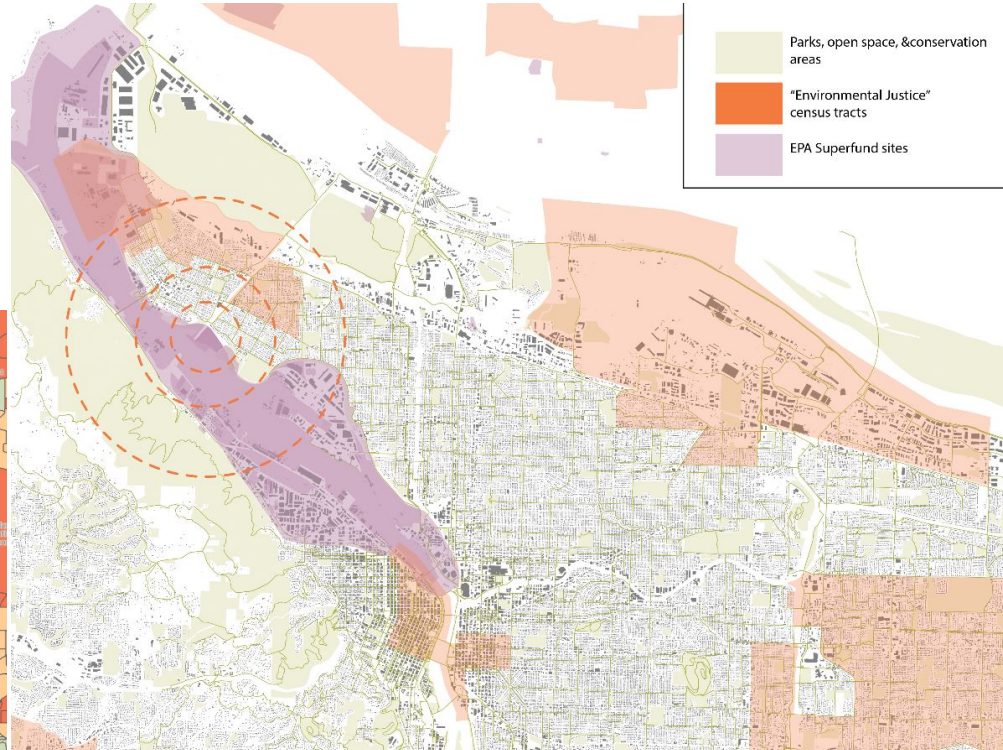
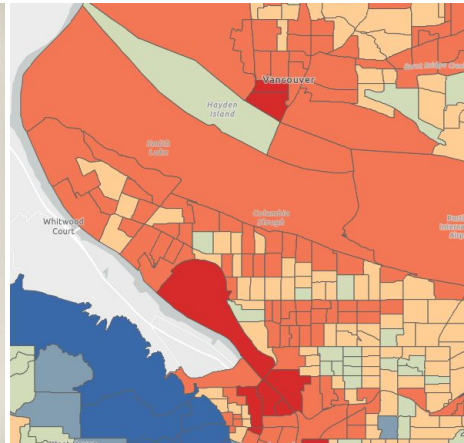
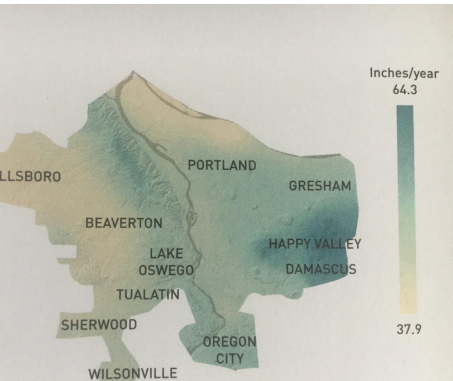
McCormick & Baxter Site

Existing Conditions and Concepts by Michael Geffel

A Garden in North Portland

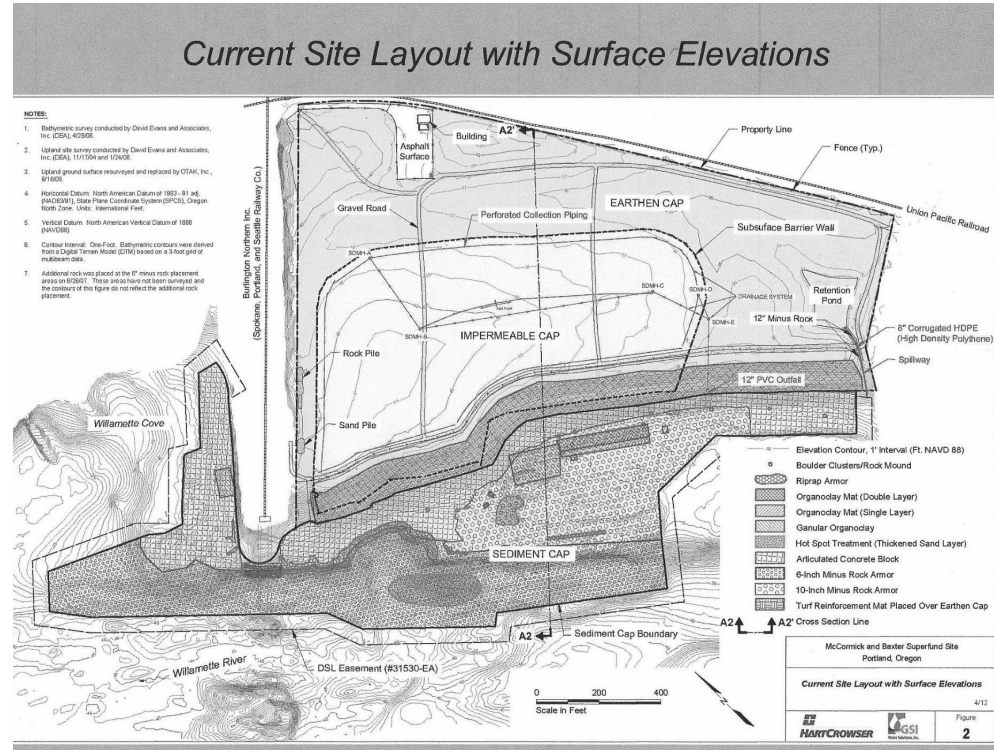
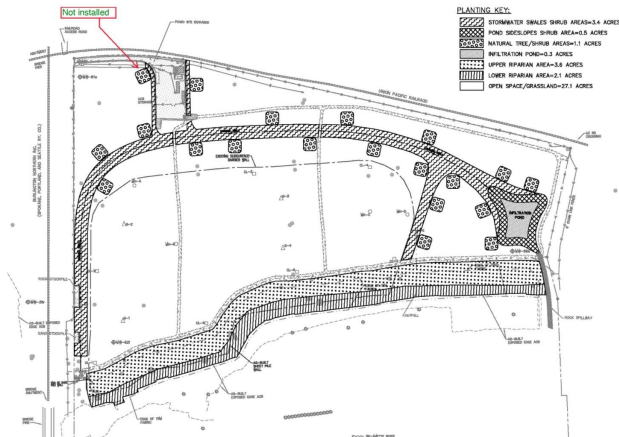


Restoring public access to the McCormack & Baxter site is also a major environmental justice issue. In addition to their proximity to superfund sites, North Portland is significantly affected by the urban heat island effect. Low precipitation further exacerbates the effects of extreme heat.



Existing Conditions

Extreme heat and low precipitation is further compounded by the shallow, sandy soils of the Earthen Cap and Impermeable Cap, and prevalence of concrete revetment in the Sediment Cap. Fortunately, 2005 restoration planting included many Oregon White Oak, Willamette Valley Ponderosa Pine, and Madrone





**PORTLAND
BOTANICAL**
Gardens

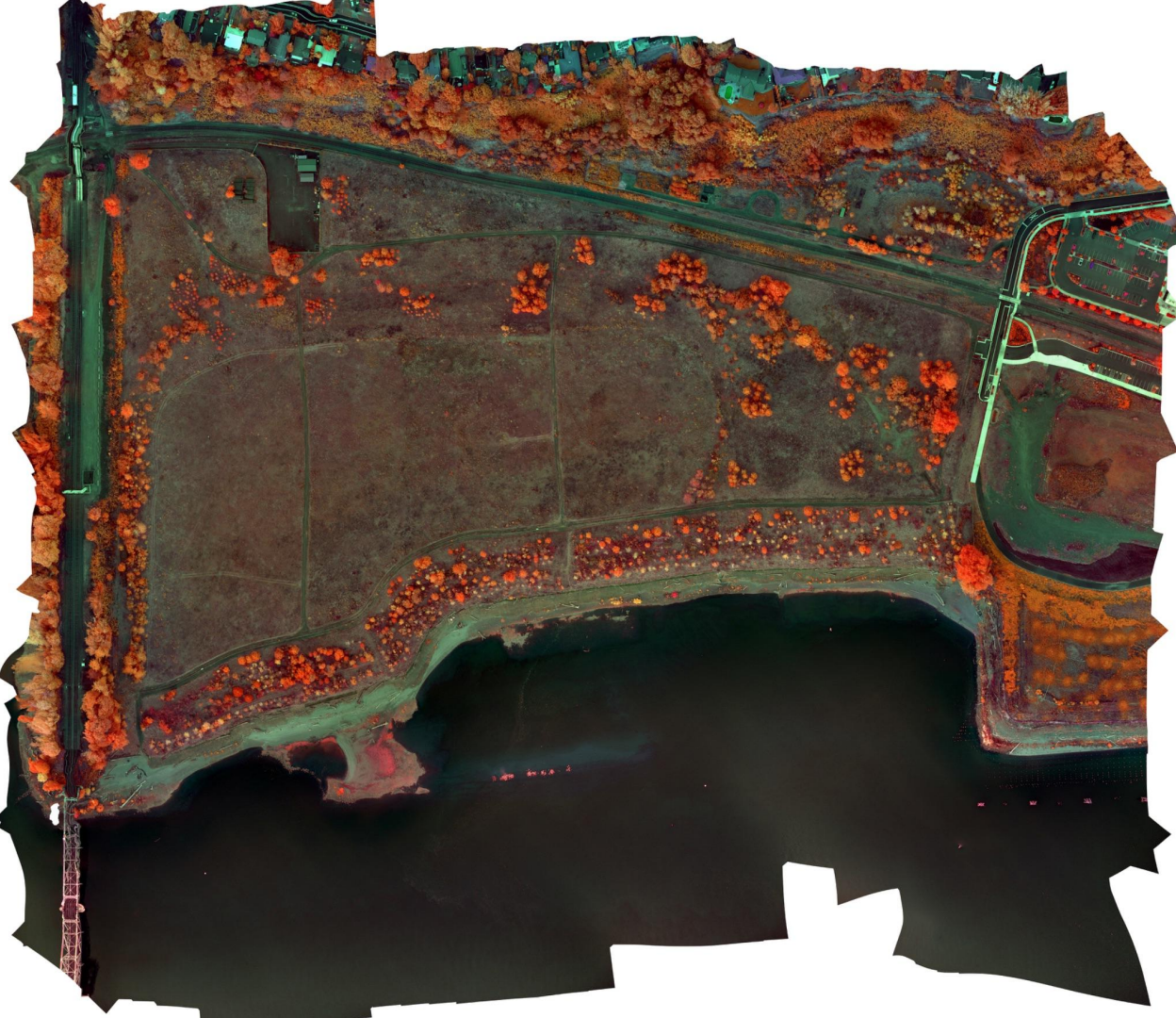


10.04.2024 Orthomosaic:

Flying this season helps to reveal the drought-tolerance of woody vegetation and late blooming herbaceous vegetation



**PORTLAND
BOTANICAL**
Gardens

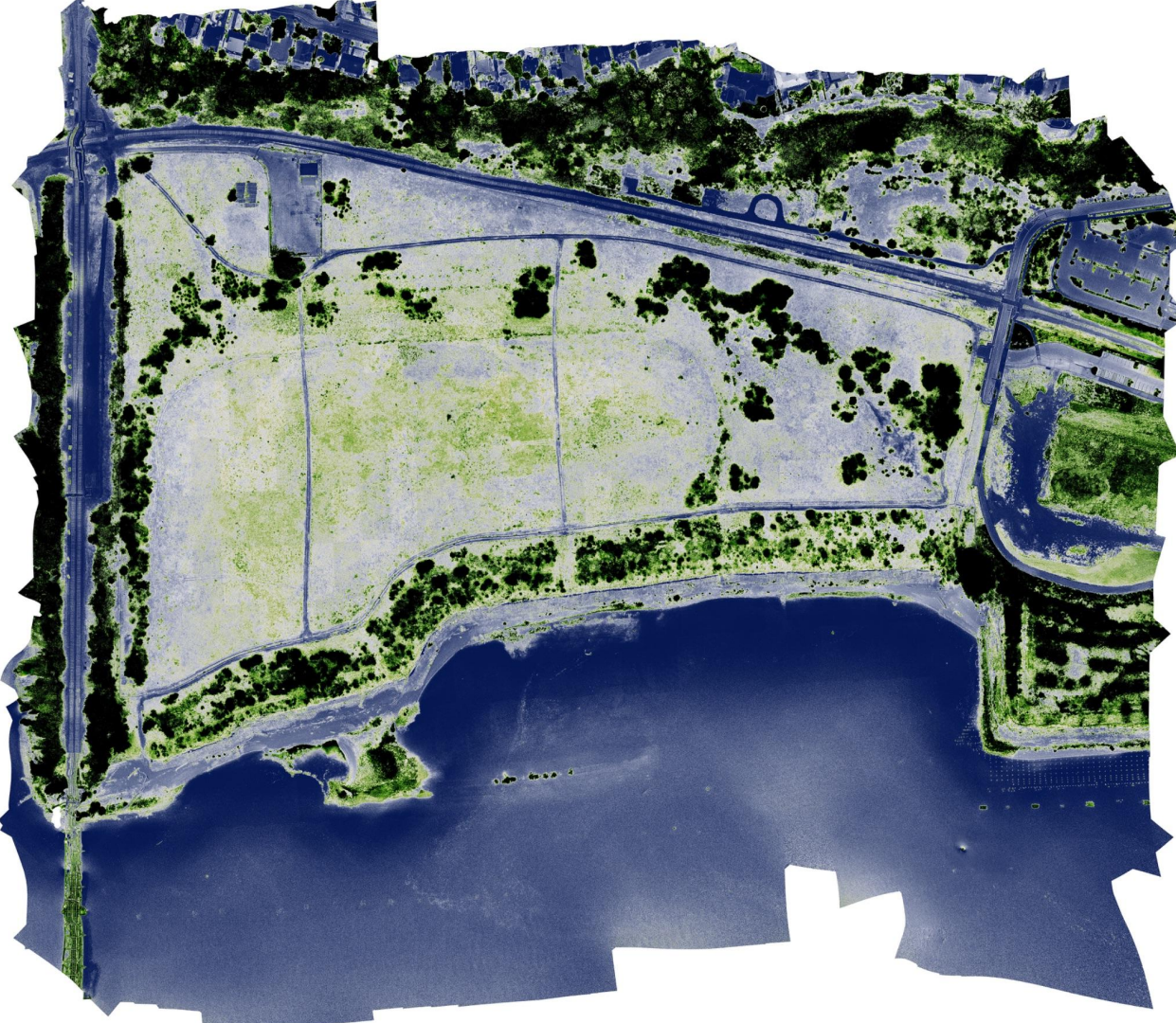


False Color Image:

Shows all actively growing plants in
red



**PORTLAND
BOTANICAL**
Gardens



Green Normalized Differentiated Vegetation Index:

Best shows healthy herbaceous
vegetation – mainly *Grindelia*,
Solidago, *Symphotrichum* (& weeds)



**PORTLAND
BOTANICAL**
Gardens



Refined Normalized Differentiated Vegetation Index:

Best shows healthy woody species –
almost exclusively Oak, Pine, and
Madrone



**PORTLAND
BOTANICAL
Gardens**



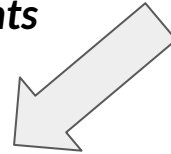
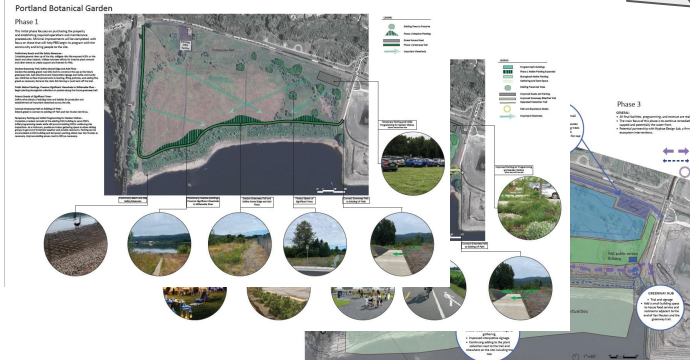


PORTLAND BOTANICAL Gardens



Conceptual Site Plans

Based on site research and initial feedback from stakeholders in the community, PBG developed a conceptual schematic to guide site planning and three conceptual phasing diagrams. Site planning just beginning and is focused on understanding site constraints, requirements, and areas required for large elements





**PORTLAND
BOTANICAL
Gardens**

***Conceptual Schematic 2024
McCormick & Baxter Superfund Site
Portland, Oregon***

Portland
Botanical
Gardens

Open Gathering Space
(Semi-Public)

Interpretive Native Plant
Collection (Public)

Greenway & Open
River Access (Public)

Willamette River

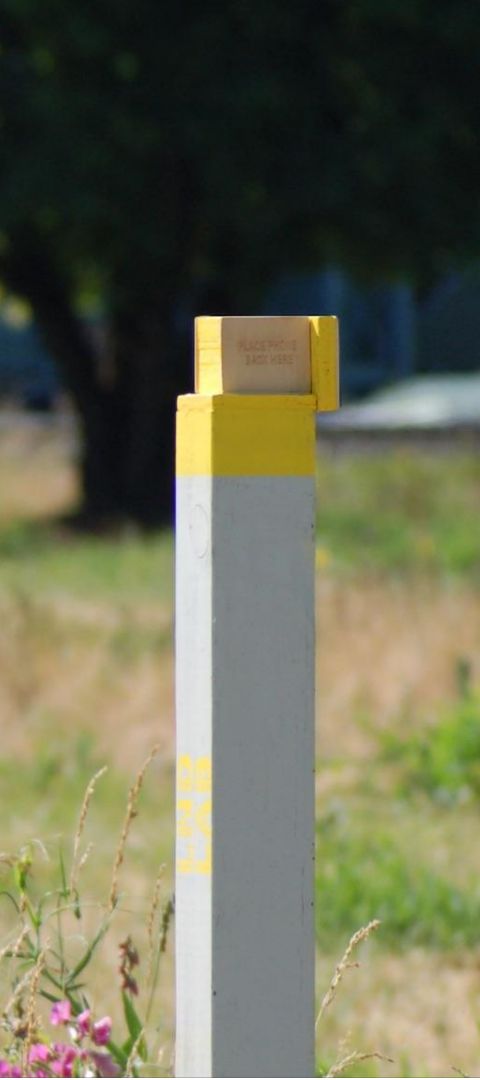


Phase 1

Conservation, Maintenance, Learning & Planning Period

How can we make this
site a community asset
in the *first year*?





Phase 2

Greenway, Waterfront Access, Research & Education

How can we build the garden's research and educational capacity to become a resource for the entire Portland Metro area?

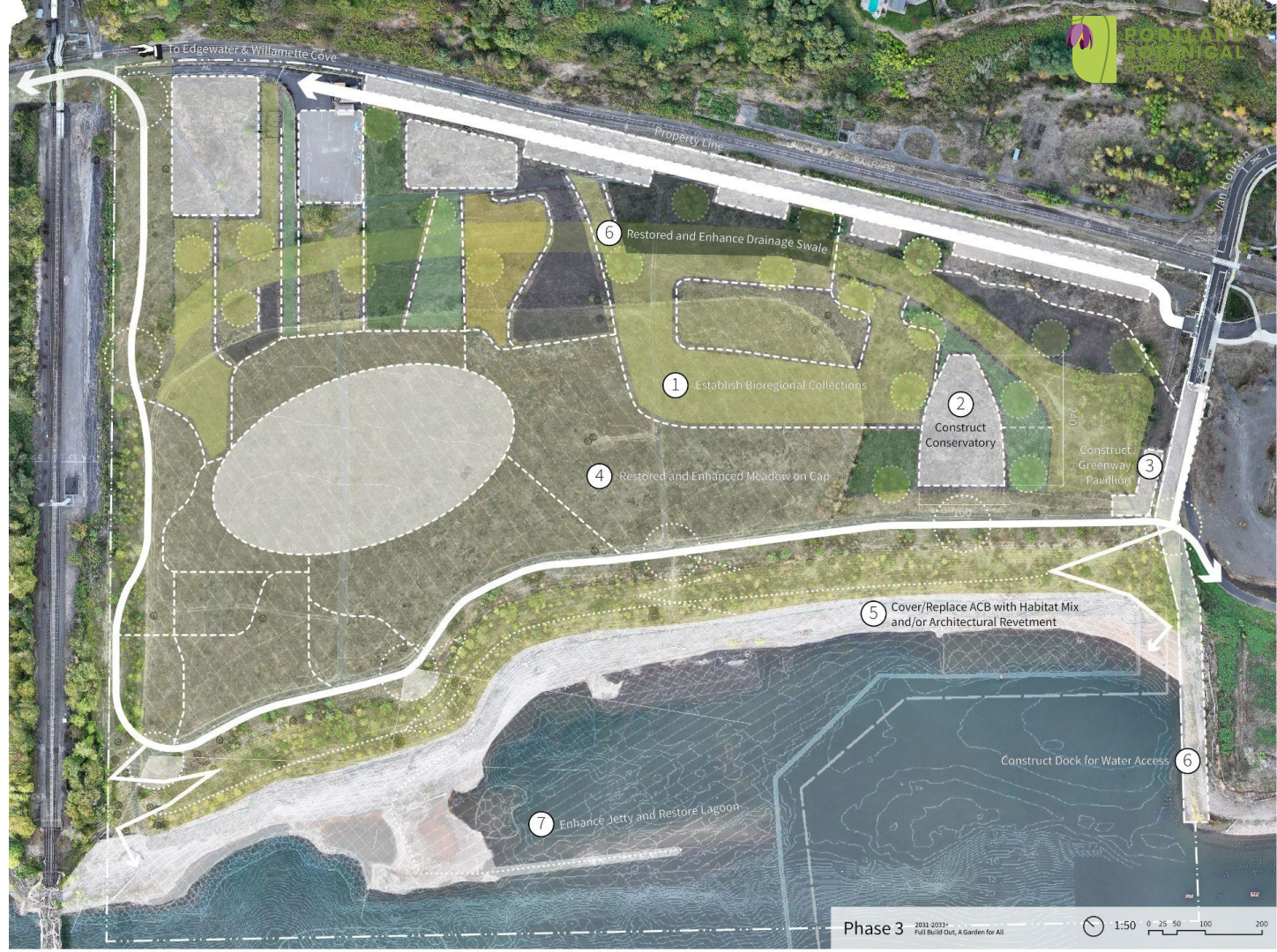




Phase 3

Full Garden & Destination for All

How can the Portland Botanical Gardens showcase PNW bioregions and climate-adapted plants to visitors from around the globe?



Bioregional Gardens

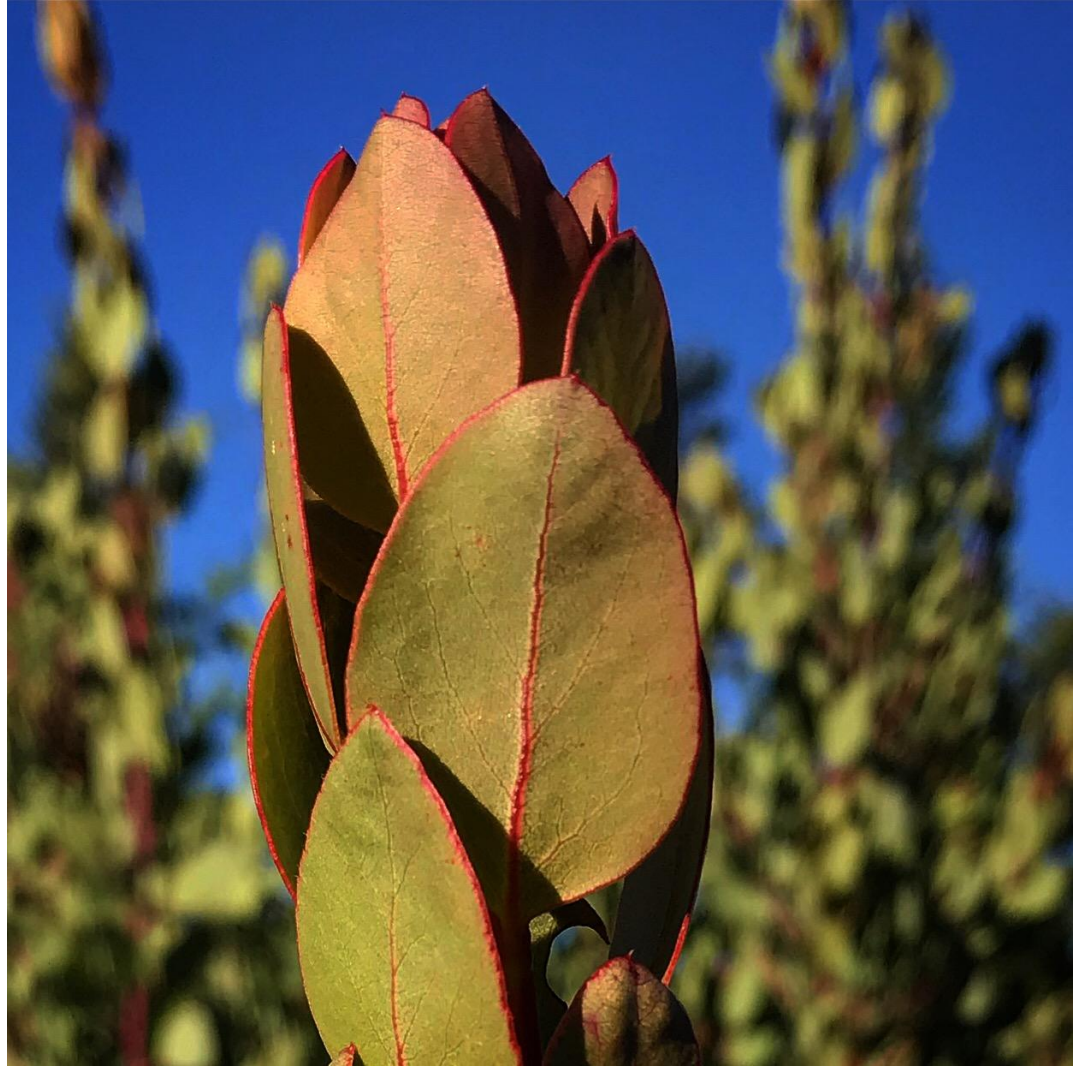
Plant collections & vocations - Sean Hogan



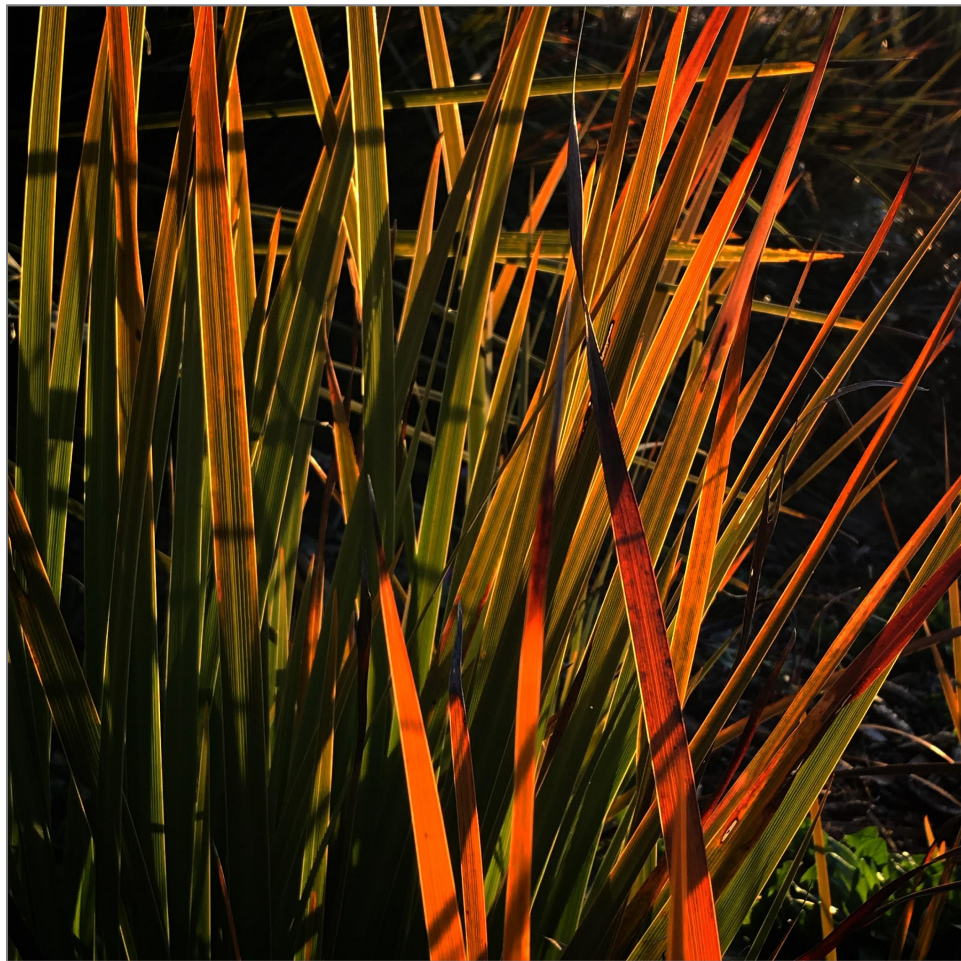












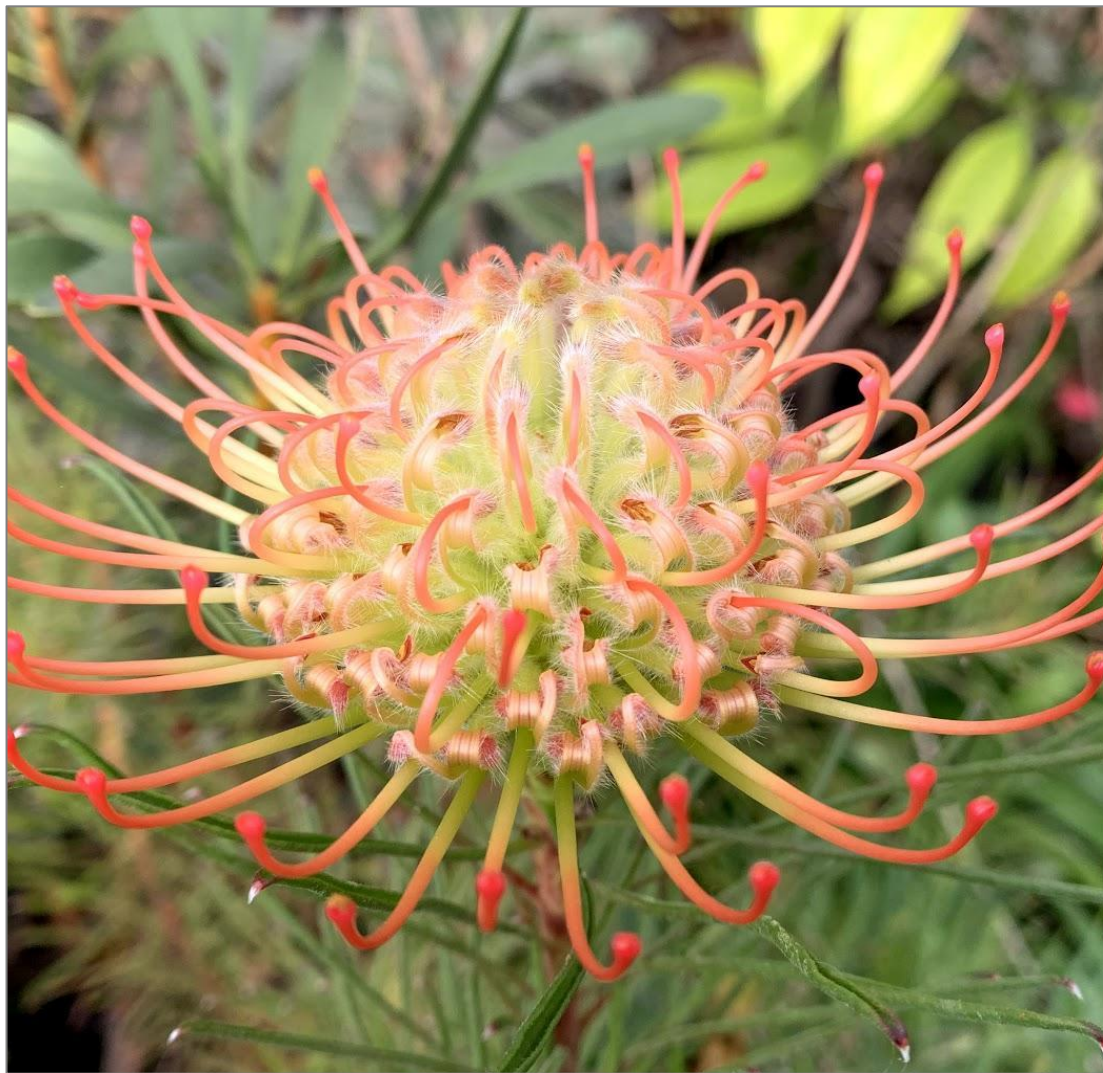




















© 2020 Pam Penick







PBG aims to promote & accommodate research of plant communities and wild places. It will highlight regional botany & plant habitat conservation & education

PBG will focus on vocational horticultural education and professional development as well.

PBG will emphasize plants & practices for a changing climate, and techniques & tools for a very large industry.



Potential Program Highlights

Inspirations from Deepa Natarajan
From Berkeley to Portland

View Programs by Theme



▼ Art + Design

▼ Families + Children

▼ Horticulture

▼ Nature + Fauna

► People + Plants

▼ Research + Conservation

▼ Wellness + Music





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL
Gardens**







**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL
Gardens**





California Native Plants

Oak Galls

FAGACEAE *Quercus* spp.

Oak bark is widely used for yellow dyes, but Native Americans used the galls found on valley oak to produce a black dye when mixed with iron. Powdered galls are also a good source of tannic acid for mordanting. In Europe and throughout the Mediterranean, oak galls were coveted for their use in making writing ink.

Coffeeberry

RHAMNACEAE *Frangula californica*

Coffeeberry leaves are best harvested in the winter when just a few berries remain on the plant. The leaves can yield khakis to yellows to greens. As its name suggests the plant was once used to make a coffee-like drink and is also used medicinally by California native peoples.

Acorns

FAGACEAE *Quercus* spp.

Acorns are rich in tannins and can be combined with iron to make a rich source of black that the Pomo Indians used. Acorns should be gathered early before the rains come, and crushed or powdered before they go into a dye bath.

Poison Oak

ANACARDIACEAE
Toxicodendron diversilobum

Yes, the same plant that gives us those nasty rashes was used by west coast Native Americans to make a black dye used in weaving baskets. The burned ash was used for tattooing.

CA Poppy

PAPAVERACEAE
Eschscholzia californica

California poppy roots and petals have documented uses as both medicine and dye. Dye derived from the bright orange roots and petals are used in native basketry, and, in recent years, for fabric.

Coast Redwood

CUPRESSACEAE
Sequoia sempervirens

Resins from the immature cones can yield purples, mauves, browns and blacks with various mordants.

Toyon

ROSACEAE
Heteromeles arbutifolia

In the winter, toyon leaves and bright red berries can be harvested to yield deep browns with reddish hints.

Mahonia

BERBERIDACEAE *Mahonia aquifolium*

Berries yield a purple dye while the inner stems yield a bright yellow dye, known as berberine, which is found in many members of this botanical family.



**PORTLAND
BOTANICAL
Gardens**



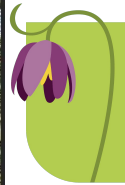


**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens



**PORTLAND
BOTANICAL**
Gardens



**PORTLAND
BOTANICAL**
Gardens





**PORTLAND
BOTANICAL**
Gardens



**PORTLAND
BOTANICAL**
Gardens

Next Steps

Next Steps

PBG is conducting technical feasibility studies (environmental, transportation, economic) and seeking feedback from Tribal authorities, community groups, and public leaders.

PBG is fundraising to acquire the property and build capacity to operate on the site as it develops (Phase 1-3).

PBG will host site walks at McCormick & Baxter, gatherings at its Pearl office, and other events of the Fall and Winter to build excitement for a 'Botanical Garden by the River.'

Allied Works

Portland Botanical Garden

Site & Research Presentation

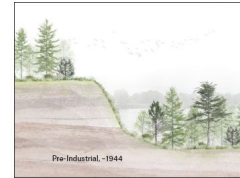
June 20, 2024

Vision

42

Garden as an Unfolding Story

THE GARDEN AS A STORY OF THE SITE THROUGH TIME



Call to Action!



PBG is inviting public feedback and support for the project.

We also invite all to join us for tours of the site. Date TBD.

Visit www.portlandbg.org for more information.



Questions