welcome!

ocean beach master plan

workshop 1 : open house

open house “rules”

+ we are here to listen, please share with us any concerns, suggestions and ideas

+ don’t be discouraged if you notice something is incomplete/missing, please tell us what we overlooked and we will make it part of the process

+ this is the beginning of a conversation, send additional comments/questions/ suggestions to:

have fun!

questions?
comments?

project website

www.spur.org/oceanbeach

project email

oceanbeach@spur.org

social media

facebook: ocean beach master plan (san francisco)
twitter: @planoceanbeach

station

1.1 ocean beach image + character

a rich history of public recreation... still visible today (1)


sutro baths
1896


windmill / life station
1903

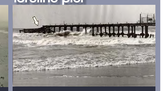

cliff house
1904


seawall at kelly's cove
1920


fleishhacker pool
1925


beach chalet
1925


great highway
1929


loreline pier
1950

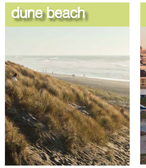
linear zones

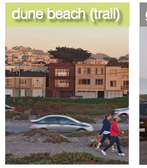

surf zone

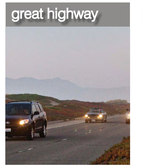

shoreline

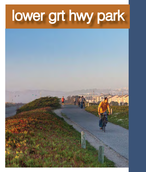

open beach


promenade


dune beach


dune beach (trail)

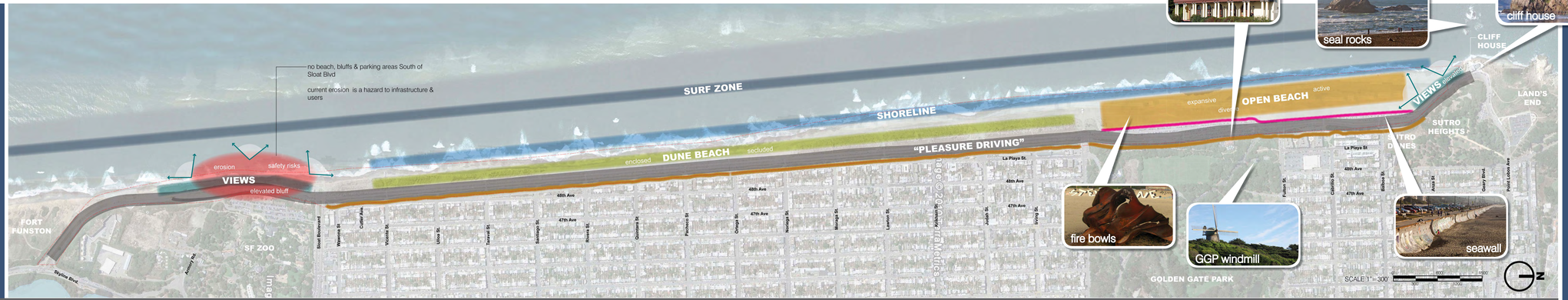

great highway


lower grt hwy park

map legend

- PROJECT BOUNDARY
- GREAT HIGHWAY
- PROMENADE
- LOWER GREAT HIGHWAY PARK (pedestrian corridor)
- VIEWS

(2) feature icons + character zones



(1) ocean beach (OB) has a rich and unique history

integrally linked to San Francisco and the Pacific Ocean

remnants of this history are still visible today

(2) OB is a place of multiple, distinct characters

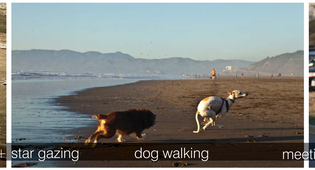
from the ocean to the bluff trails,
from the northern open beach to the southern beach dunes,
OB provides opportunities for outdoor recreation and to enjoy the Pacific Ocean vast and dramatic landscape

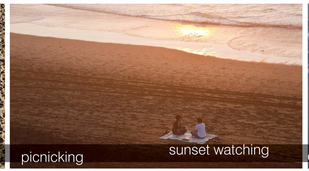
station

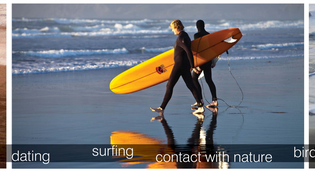
1.2 uses + activities + program

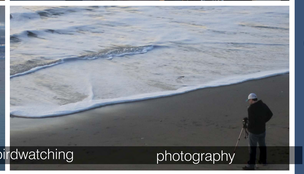
2 visitation “spikes”

1









1 multiple activities currently take place at ocean beach

several user groups enjoy ocean beach every day

2 visitation pattern tends to be in ‘spikes’

high visitation during sunny days and special events, low visitation during typical foggy days

3 there is lack of public amenities + facilities at ocean beach

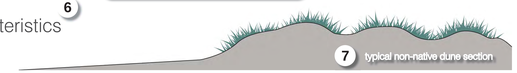
map legend

- restroom
- cafe/restaurant
- bench
- stairwell
- firebowl
- visitor attraction

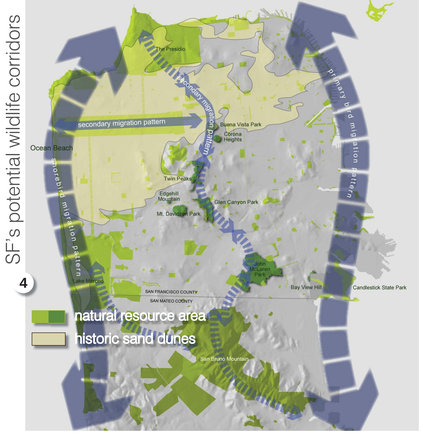
3 existing elements + facilities

station 1.3 ecology

6 sand dunes characteristics

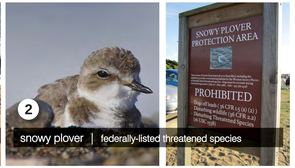


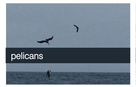
SF's potential wildlife corridors



sand dunes evolution

ocean beach native species





map legend

- project boundary
- dunes
- bluffs
- snowy plover protection
- shorebird corridors

1 native wildlife at OB

2 western snowy plovers federally threatened species
plovers overwinter on OB winter months average about 30 plovers

3 bank swallow state threatened species
swallows nest on the cliffs of Fort Funston

4 OB's habitat potential

OB provides very important sandy beach habitat along the pacific flyway for overwintering shorebirds

OB is probably the most important shorebird site in the GGNRA

sanderlings account for 70% of shorebirds on GGNRA coastal beaches

National Park Service has released a Draft Plan/Draft Environmental Impact Statement (Plan/DEIS) for

5 dog management in GGNRA for a 90-day public comment period, ending on 4/14/11

6 sand dunes

7 all the existing dunes at OB are non-native

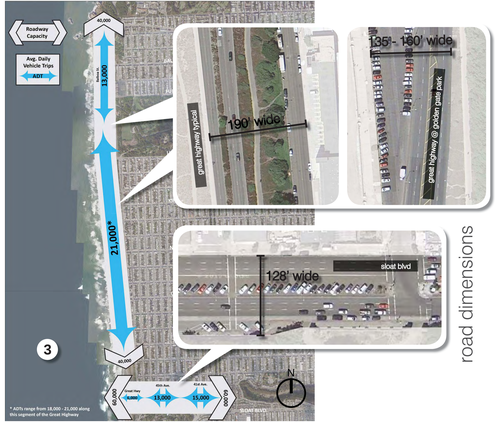
dune restoration is possible but challenging and co stly

8 1990 restoration efforts have been mostly taken over by non-native species

station 1.4 access + connectivity

5 the great highway

traffic volumes | great highway + sloat blvd. | road dimensions



regional connectivity

1 local connectivity

map legend

- project boundary
- great highway
- major arterial road
- muni metro
- muni bus
- promenade
- pedestrian connection
- bike path / lane / route
- planned bike lane
- traffic light
- muni line number
- pedestrian connectivity gap
- beach access (path, stair, ramp)
- key pedestrian connections
- parking

1 local connectivity

1 movement

along the Great Highway is fairly easy, but connections to adjacent parks, trails, and amenities is uneven

2 vehicular traffic

its right-of-way is divided into upper and lower sections by a bermed multi-use trail

3 traffic capacity

the Great Highway and Sloat Blvd are unusually wide and have unused traffic capacity. The GH narrows at each end.

transit

OB is well-served by rail and bus service, but rider amenities are limited

4 bicycle connections

continuous bike path from Sloat Blvd to Balboa, but connections into the city-wide network are interrupted

bike parking is limited

5 history

the great highway was completed in 1929, the widest stretch of such pavement anywhere in the US at the time

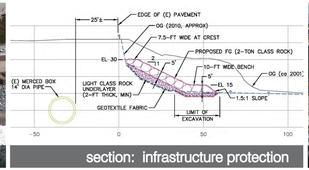
it was conceived and designed for "pleasure driving"

bike/pedestrian path was added and roadway narrowed in 1986

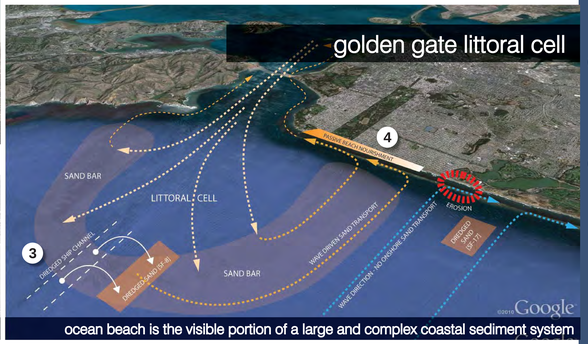
station 1.5 coastal dynamics

erosion + emergency revetments

2 seawalls



beach enlargement - north end



shoreline interventions

1 fill
shore has been filled 200ft seaward from 1800 to 1930 to construct the Great Highway & SF Zoo

2 armoring
13,000 ft of shore (seawalls + revetments) out of 20,000 ft of total shore

after severe erosion episodes in 2010, new emergency armoring was installed

3 dredging
sand dredged for shipping channel is deposited for currents to transport onshore

4 beach nourishment
5million cubic yards of sand added since 1970's

future beach nourishment may pump dredged sand directly onto the beach, helping address erosion

5 retreat
city has tried to maintain barrier sand dune to buffer waves and erosion since 1980's

the Great Highway south of Sloat was recently rebuilt farther east, in a median designed for retreat

map legend

- PROJECT BOUNDARY

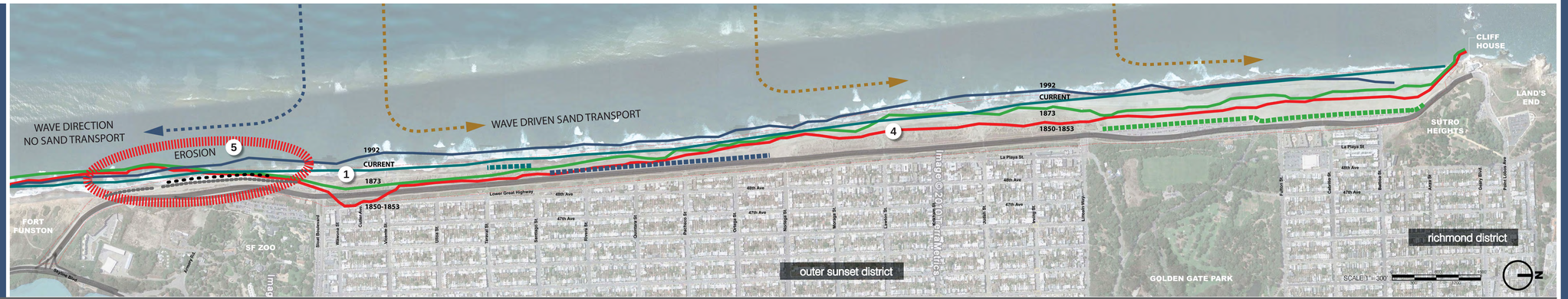
HISTORIC SHORELINES
- CURRENT SHORELINE
- SHORELINE (1992)
- HISTORIC SHORELINE (1873)
- HISTORIC SHORELINE (1850-1853)

THE GREAT HIGHWAY
- THE GREAT HIGHWAY (1929)

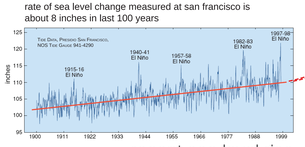
SEAWALLS
- NORIEGA SEAWALL (1988-1993)
- TARAVAL SEAWALL (1940)
- O'SHAUGHNESSY SEAWALL (1915-1922)

REVETMENTS
- RUBBLE
- EMERGENCY REPAIR AREA

shoreline interventions



station 1.5 coastal dynamics climate change



rate of sea level change measured at san francisco is about 8 inches in last 100 years

recent sea level rise

the rate of rise is anticipated to go up exponentially

state guidance suggests sea level rise could reach:

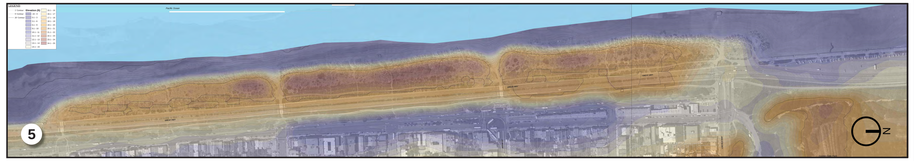
14 inches by 2050 and 55 inches by 2100

Year		Average of Models	Range of Models
2030		7 in (18 cm)	5-8 in (13-21 cm)
2050		14 in (36 cm)	10-17 in (26-43 cm)
2070	Low	23 in (59 cm)	17-27 in (43-70 cm)
	Medium	24 in (62 cm)	18-29 in (46-74 cm)
	High	27 in (69 cm)	20-32 in (51-81 cm)
2100	Low	40 in (101 cm)	31-50 in (78-128 cm)
	Medium	47 in (121 cm)	37-60 in (95-152 cm)
	High	55 in (140 cm)	43-69 in (110-176 cm)

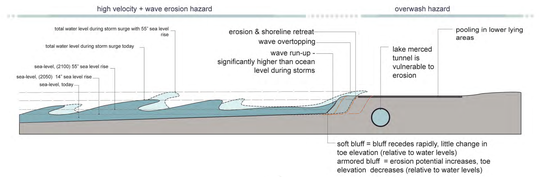
1 future sea level rise (SLR)

SOURCE: state of california sea-level rise interim guidance document, october 2010

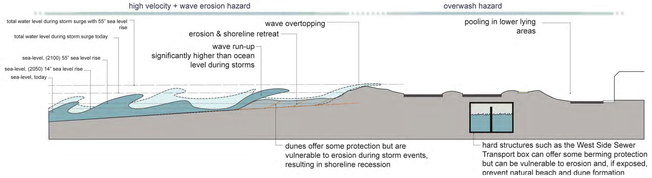
elevation map of central dunes area



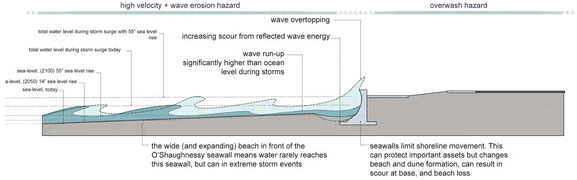
2 seawall overtopping



4 diagrammatic bluffs section



3 diagrammatic dunes section



4 diagrammatic seawall section

map legend

- project boundary

ROADS + PATHS
- the great highway (1929)

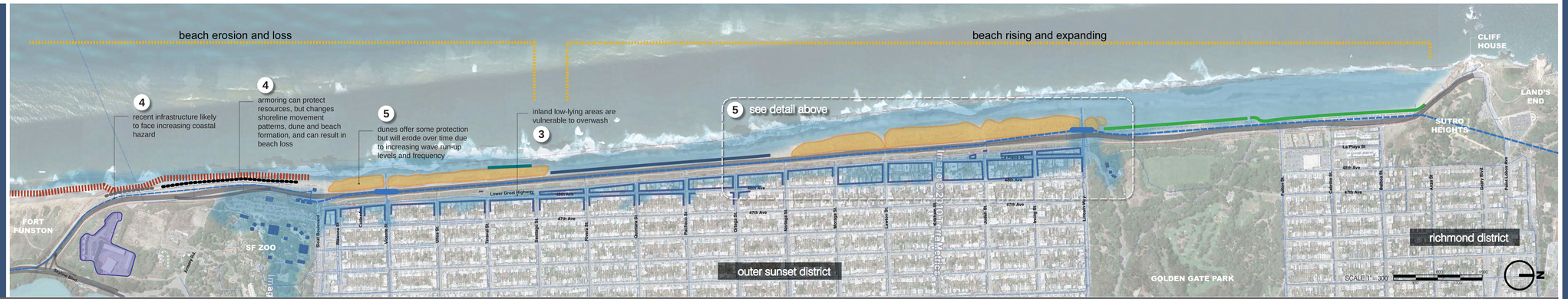
SEAWALLS
- noriega seawall (1968-1993)
- taraval seawall (1940)
- o'shaughnessy seawall (1915-1922)

REVETMENTS
- rock stabilization treatment
- emergency repair area (2010)

TOPOGRAPHICAL FEATURES
- dunes
- bluffs
- low-lying areas

STRUCTURES
- sewer pipes
- major sewer infrastructure
- wastewater treatment facility
- buildings

coastal features for climate change planning



sea level rise

will cause the shore to recede landward

"how much?
-it depends"

1 / sea level rise is likely to reach 55 inches by 2100, with significant ramifications for Ocean Beach

/ storm events may become more frequent and severe

/ the relationship between sea level rise, erosion, and shoreline movement is complex + dynamic

2 / during storm events, wave action can far exceed sea level

3 / rising seas and storm surges change the shape and elevation of beaches, bluffs and dunes

4 / the presence of seawalls + other hard structures limits shoreline dynamics: this can protect important assets, but change beach and dune formation and can result in beach loss

5 / existing dunes + infrastructure will offer some protection -- for a time, but coastal hazards will increase

/ impacts to the dunes, bluffs, roadway, & infrastructure -- *and eventually to private property* -- will become more frequent and severe

/ the coast is changing, and we have some understanding of how -- but how much and how fast is uncertain

several studies are underway to address these questions

1.6 infrastructure

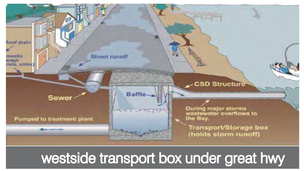
past

1 former water quality issues at ocean beach greatly influence the development of current infrastructure

60-70 CSO's/ yr (before)

present

water quality



westside transport box under great hwy

<8 CSO's/ yr (after Clean Water Program)

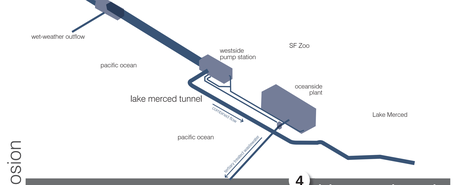
SF stormwater management system

5

2 westside transport box

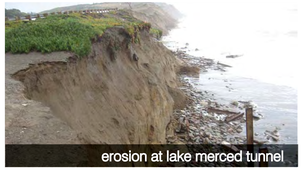
westside pump station

6 oceanside wastewater treatment plant



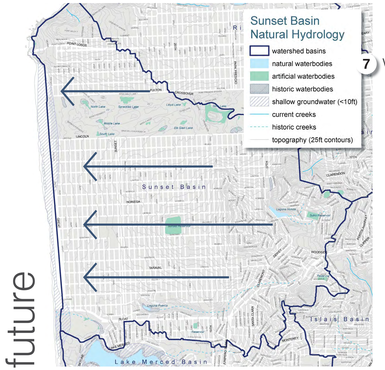
erosion

4 lake merced tunnel



erosion at lake merced tunnel

future



7 watershed / low-impact design

low-impact design city

stormwater detention - Pacific Shores Ctr

past

water quality

1 pre-1986 : problematic combined, untreated, system overflows directly into ocean almost every time it rains
60-70 CSO's/ yr

present

water quality

2 westside transport box (1986) is built : treatment & storage of 49.3 million gallons

3 result : better water quality & fewer combined sewer overflows onto beach
8 overflows per year, max

erosion

4 lake merced tunnel at risk due to erosion, 40' of bluff recession, 2010

5 infrastructure at OB handles the whole west side of SF's single watershed

6 Oceanside Wastewater Treatment Plant (1993) : the city's newest treatment facility, treats SF's west side

future

low-impact design (LID)

7 LID & watershed management greatly lessens the load

map legend

- project boundary

SEWER SYSTEM
- westside transport box
- sewer pipe less than 50 years old
- sewer pipe more than 50 yrs old
- sewer pipe more than 80 yrs old
- sewer pipe (unknown age)
- water infrastructure building
- wet-weather outfall (combined sewer)

REVETMENTS
- rubble
- emergency repair area

* CSO's = combined sewer overflow

infrastructure

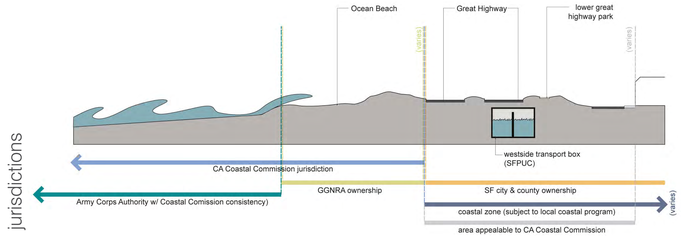
station 1.7 management + stewardship

AGENCY PARTNERS

- National Park Service
- California State Coastal Conservancy
- SF Public Utilities Commission
- SF Dept of Recreation & Parks
- Department of Public Works
- SF Municipal Transportation Agency
- SF Planning Department

jurisdictions

1



sand transport by wind

2


beach / sand maintenance


dunes


trails

maintenance + stewardship

3

waste management

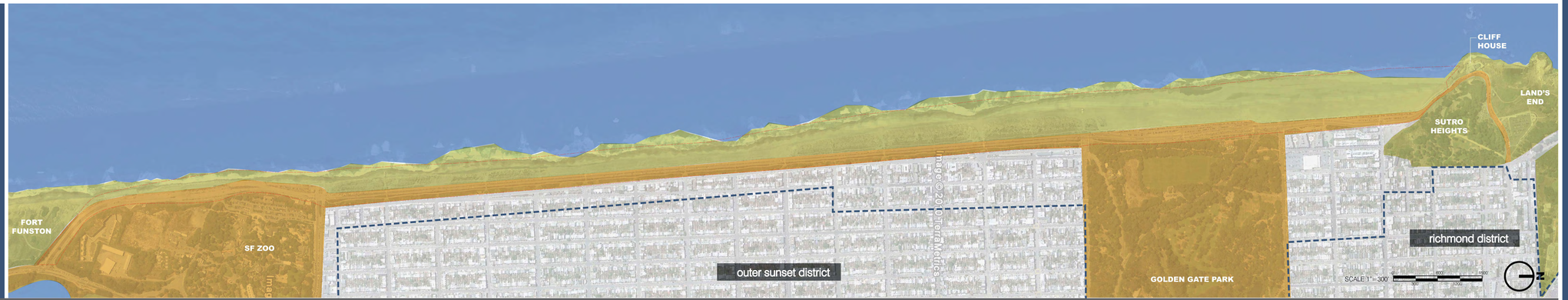

restrooms / facilities

dog management

map legend

- PROJECT BOUNDARY
- Golden Gate National Recreation Area (GGNRA) ownership
- SF city & county ownership (excludes private property)
- CA Coastal Commission jurisdiction & Army Corps Permitting Authority
- coastal zone subject to local coastal program

jurisdictions 1



governance / administration

1 the project site is owned + managed by a myriad of agencies including:

- GGNRA / National Park Service
- CA Coastal Commission
- SF Public Utilities Commission
- SF Department of Recreation and Parks
- Army Corps of Engineers
- SF Department of Public Works
- State Lands Commission

... and others

maintenance

2 sand management
road, trail, dunes

waste management

restrooms

use pattern challenge
baseline and spikes

3 management approaches + policies

NPS
recreation & resources values, natural processes

City side
transport, infrastructure, historic resources, civic value

station

2.1 overall project goal statement

"To knit the unique assets and experiences of **ocean beach** into a seamless and welcoming public landscape, planning for environmental conservation, sustainable infrastructure, and long-term stewardship."

station

2.2 key focus areas

evaluation criteria

project aspirations







image + character

preserve and celebrate the beach's raw and open beauty, while welcoming a broader public

uses + activities + program

accommodate diverse activities and users, managed for positive coexistence

ecology

restore and establish conditions that support thriving biological communities

access + connectivity

provide seamless and fluid connections to adjacent open spaces, the city, and the region

coastal dynamics

identify a proactive approach to coastal management, in the service of desired outcomes

infrastructure

evaluate infrastructure plans and needs in light of uncertain coastal conditions, and pursue a smart, sustainable approach

management + stewardship

provide an approach to long-term stewardship across agencies, properties, and jurisdictions

your "investment" reflects your priorities

"today" BOX

investment for today, your immediate priorities

"2100" BOX

investing for the future, your priorities for the world your great grand children

station

3.1 user preferences

using the color dots provided, mark the map below to reflect the following:

- what is your favorite place at ocean beach?
- where is the best gathering place at ocean beach?
- what is the best viewing spot?

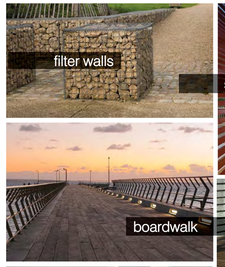
places you love at OB

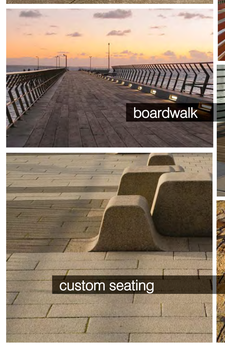
- beach
- ocean
- cliffs
- bluffs
- sand dunes

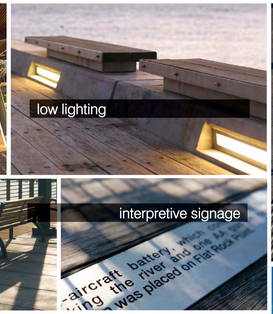
station

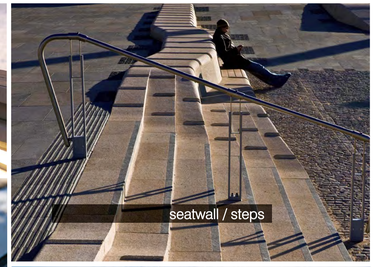
3.2 user preferences
what elements/facilities are missing at ocean beach?

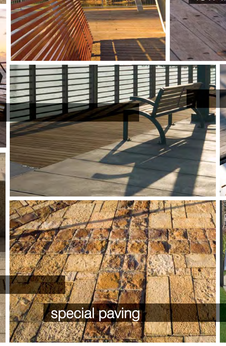
NOTE: these images are NOT intended to represent materials or design recommendations for OB, they solely depict types of elements and facilities used in other urban beaches around the world

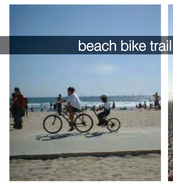


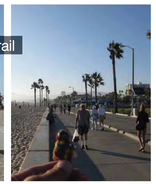


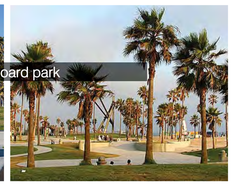


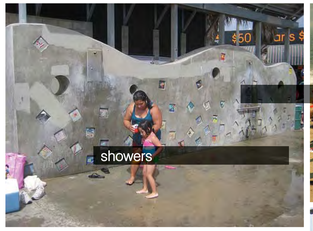


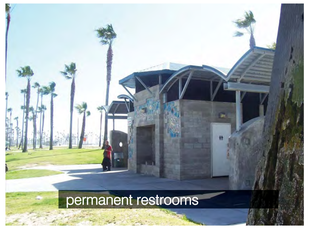




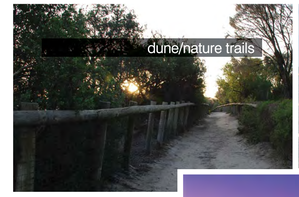


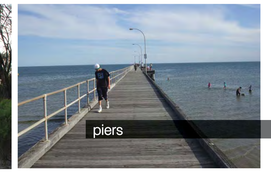


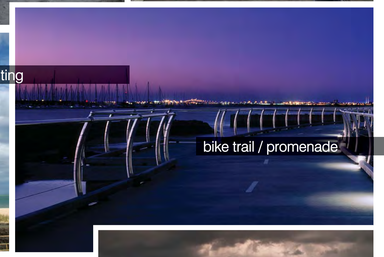


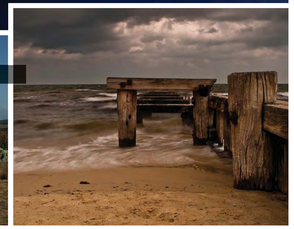


venice beach, california

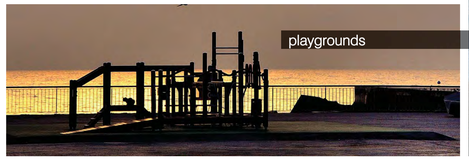


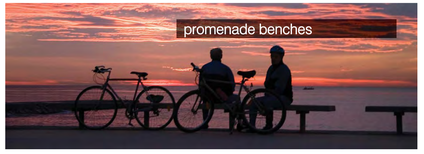


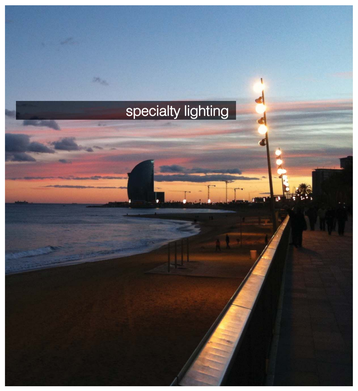


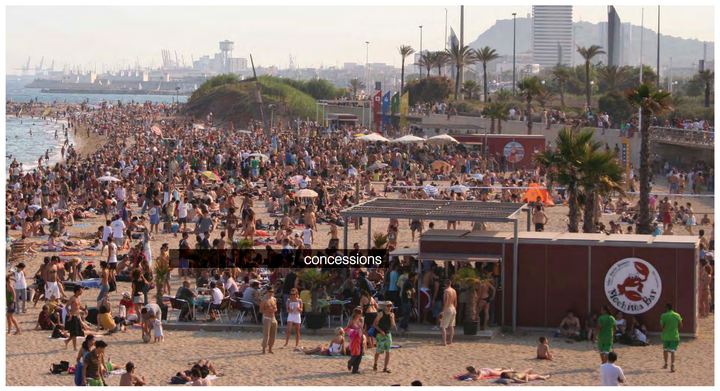


melbourne, australia (altona beach, bells beach)









barcelona, spain

station

4.0 do you have any ideas for the improvement of ocean beach?

any idea... any scale... any aspect... anything goes...

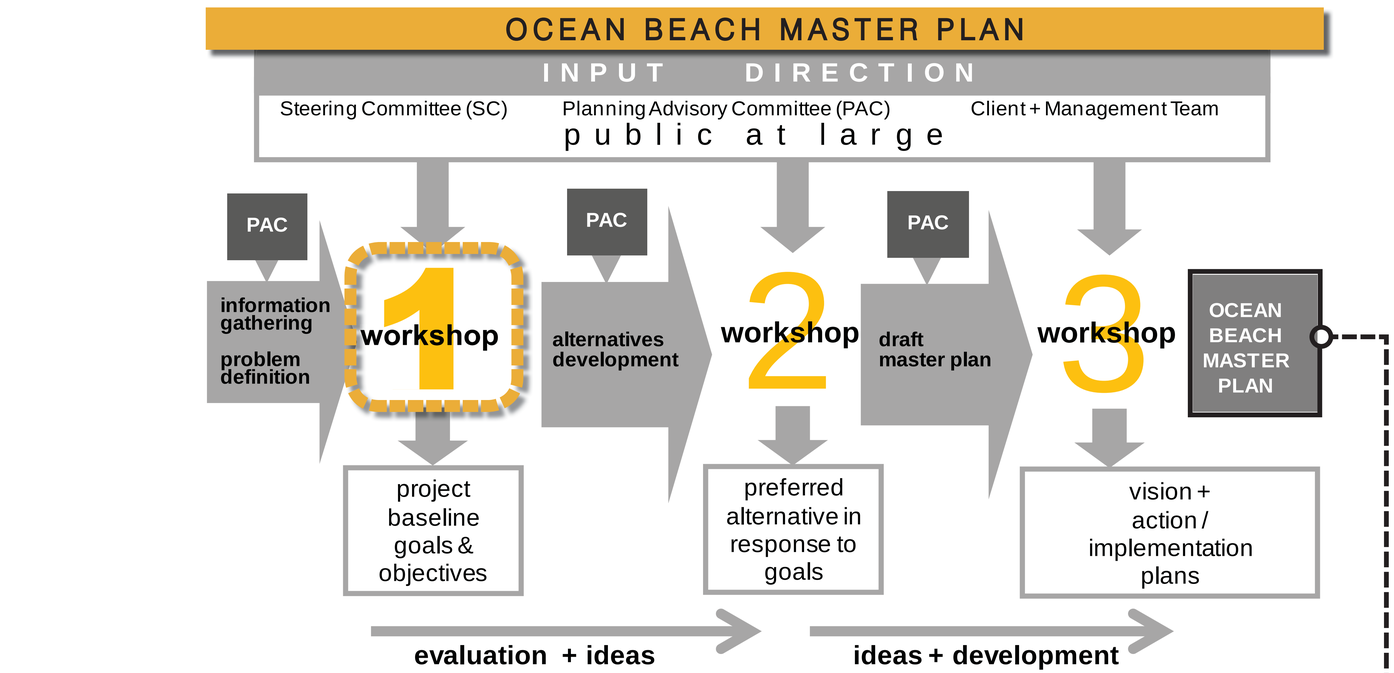
how about?

- physical elements
- policy recommendations
- character-building elements
- interpretation concepts
- ...

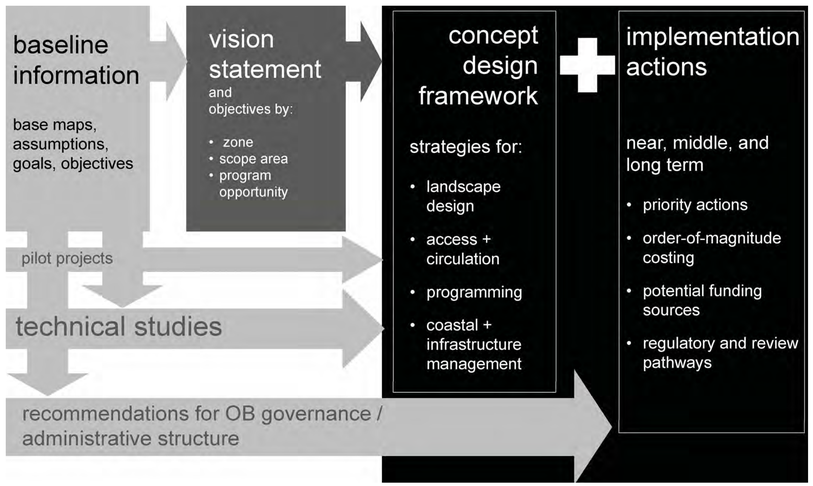
station

5.0 project timeline + opportunities for public input

process + timeline



what will be included in the ocean beach master plan?



project team

SPUR (SF Planning + Urban Research)
project lead
Project Manager: Benjamin Grant

consultant team

AECOM
Landscape Architecture, Environmental Planning

ESA PWA
Coastal Engineering

Sherwood Design Engineers
Civil Engineering/Infrastructure

Nelson/Nygaard
Transportation

work plan

+ startup
stakeholder interviews
assemble consultant team
(jun-aug 2010)

+ problem definition
public workshop #1 (today!)
(sep 2010-jan 2011)

+ alternatives development
public workshop #2
(feb-may 2011)

+ draft master plan
public workshop #3
(jun-sep 2011)

+ final master plan
(oct-dec 2011)

opportunities for public input

3 community workshops

project website
www.spur.org/oceanbeach

project email
oceanbeach@spur.org

social media
facebook: ocean beach master plan (san francisco)
twitter: @planoceanbeach

SPUR programming

station

6.0 comments + general input

your comments...

your input...

your suggestions...

your ideas...

do you have additional comments?

questions?

suggestions?

Using makers, post-its or any other method, write your comments here and share your ideas with the rest of the open house participants.