

Environmental/Physical/Transportation Subcommittee

in attendance: Bill Werner, Michael Wiener, Judy DeReus, Jordan Rogers, Vicki Nichols, Michael Linder, Chris Gallagher
also: Michael Rex

Next Meeting: monday 4/20 at 6pm at Salty's to check in on information gathering

Tour of Area: saturday 4/25 at 7am at Salty's for breakfast and walking tour

Information Sharing:

Jordan:

- seeing lots of pressure coming in from various agencies that will affect sausalito from the waterside
- new regulations, new codes
- BCDC, EPR, SF Water Agency, EPA, NOAA fisheries, State Water Quality Control
- all these water related agencies have jurisdiction 100 feet inland from the mean tide line
- waterboards.ca.gov/sanfranciscobay/ - information about site clean up, enforcement, wetlands, etc. site for the San Francisco Bay water quality control board.
- Clean Marina Act (group formed of all the marinas in the state to help set standards themselves)
- new fill a few years ago, stopped some flooding inundation
- did a study on subsidence on the clipper property that was given to the city
- sewage spills in richardson bay

Michael Linder:

- 1992 State Water Quality Control Board started to control wastewater, everything that goes in the bay.
- Sampling everytime it rains to control runoff that goes into the bay through storm drains etc.
- permits from 5 different agencies, plenty of regulation
- spend as much time cleaning as working

Robin:

- underwater on the BCDC 100 flood maps
- marinship is on landfill, sinking appx. 1/2 inch a year
- tides getting higher?
- tidal inundation through storm drains can cause pollution on land from the bay
- tidal inundation through storm drains causes more and more flooding on land (over 6' tides) as land sinks
- high tide with heavy rains can cause serious flooding, colloma street creek
- holt greene commissioned a study by kers clausen to put a flapper valve at the colonna street storm drain along with a catch basin to alleviate flooding
- could be made available?

Michael Wiener:

- built on 250 feet of mud that moves and shifts
- spalding boatworks is jacked up every couple of years.

- uses RO filter to clean their industrial water. evaporation tanks.
- don't have much parking, need more. vehicular circulation is a big issue.
- railroad grade through marinship is built on pilings
- must be other communities that
- inland, FEMA does not allow reduction of the floodplain, making it difficult to add fill to raise land.
- adding fill can also mean adding weight that can cause that land to sink and shift more.
- working on boats far away from the water inside a building would be the best for containment

michael rex:

- can build buildings like a raft so it moves with the water/land
- can jack up buildings but then need to build stairs, extend ADA ramps for access
- most recent buildings on liberty ship way all built on piles

General Notes and Assignments for data collection:

1. Subsidence

- how should buildings be built so that they don't keep sinking
- how can they be built so they don't reduce the size of the flood plain if raised
- reference Lemon soil quality report for Arques (mike linder)
- reference Clipper study on land subsidence on their property (jordan)
- reference images of pilings coming up (from land sinking) through asphalt in arquez
- spalding boatworks data (michael)

2. Flooding

- reference FEMA flood maps for the area (vicki), look at the flood map to define the flood zone in the marinship
- rainwater catchment systems to also help alleviate flooding
- get agency maps and studies on rising sea levels (chris and judy)
- reference kers clausen report for holt greene on flooding solutions around collona channel (robin)

3. Water Quality

- drainage, what is the soil like?
- run-off from roads and hills through storm drains into the bay
- sewage spills
- look into how much pollution and siltation is coming into bay through city storm drains, clipper has testing data (jordan)

4. Environmental Clean-up Needs/Code Requirements

- multiple agencies regulating 100 feet into the shore from the mean tide line
- businesses need to follow lots of codes, can be expensive
- reference NOAA information on fish and wildlife environments
- reference schoonmaker ERI report (judy)

5. Infrastructure Needs

- gas lines in moving ground, are they a hazard?

- electrical service, does undergrounding make sense
- storm drains back flow
- sewer pipes also breaking with moving land

6. Vehicular circulation

- roads in poor condition, land movement causes cracks
- not all roads are public roads, many are private and not maintained - find out which (vicki)
- city funds generally not available for fixing roads and storm drains directly, likely repairs from private funds
- original circulation plans not fulfilled, current circulation very cut-off
- discussion of putting parking areas in the marinship for downtown visitors (\$25K per space to build parking)
- raingarden pervious concrete block systems could be good systems for paving around here

8. Seismic

- area is in a liquification zone
- reference to seismic map from USGS (Robin)
- building stability

9. Energy use

- solar could be a good option because its a sunny area of sausalito. city is eager for solar projects.
- wind energy, windy are of sausalito

10. Structures

- visual inventory
- view corridors