

## **SURF ZONE—3<sup>RD</sup> Subcommittee Meeting**

Councilmember Dyda introduced the topic for the evening “Oceanography”

Romi explained the order of the meeting.

### **INTRODUCTIONS**

### **Ray Mathys PowerPoint presentation**

Questions on presentation:

1. How deep is slide plane? Varies
  2. Is the reef anchored: No
  3. Does the bentonite extend below surf zone? No answer
- Robert Douglas’s book discusses clay and movement can the experts talk about surf action; wave actions is cutting the toe which keeps repeating and thus the slide moves; also ground water lubricates the slide and the slide moves.
  - What would shoreline look like if reefs were installed? 1) Dewatering and remove water is the most important 2) keep water out then install reef to prevent soil from being removed.
  - Kelvin found a line to Army Corps report
  - How does loading the toe of the slide work? Not well so far- no calculations performed but  $F=ma$  is still true so when calculated the correct  $F$  (weight) placed at the toe of the slide. The  $ma$  would be achieved to accomplish equilibrium.

**MAJOR ACTION PROPOSALS AND ATTENDEES CAST VOTES FOR TOP 4 IDEAS**

- 1. Hire competent coastal engineers and implement recommendations (VOTES=7)**
- 2. Artificial Reefs (VOTES=5)**
3. Create a buttress on the land side of slide by removing bentonite based calculations- then refill at compacted dirt **(VOTES=4)**
- 4. Data taken to identify the slide plain below ocean and how much of it has moved if any (VOTES=2)**
- 5. Hard copies of Army Corps so anyone can take a look and get strong financial costs; initial capital as well as maintenance-engineer to update (VOTES=2)**
- 6. 10-12 geographical data points located through slide and monitor them so we know- with 4 (VOTES= 5)**
- 7. Prevent dirt entering water by whatever means (VOTES=3)**
- 8. Empower consultants to take advantage of knowledge on similar slide (VOTES=2)**
9. Amen to #8
10. Make sure all outflows extended beyond rock into ocean
11. Where's the money coming from?
12. Spend money to actually slow it
- 13. Go back to graded road; maintained weekly to cut costs and put money towards slowing the slide (VOTES=7)**
- 14. Communicate with coastal commission and other relevant agencies sooner rather than later (VOTES=5)**
- 15. Primary attention paid to water up there coming into PB area (VOTES=1)**
- 16. City and all of us think if we value preventing silt into the coastline-do we care about that? (VOTES=1)**
- 17. What's ROI? PB Community, homes moving→ Increase in value; ecology, road repair; assistance in remediating problem; stabilizing sewer pipelines (VOTES=2)**
- 18. Reports from internet-hardcopy and having reading room where we could go read them (VOTES=3)**
- 19. Assess the environment aspects preserve and ocean ecology; what fixing the slide (+/-) impacts would do- and made available to the public (VOTES=7)**

Requests to engineers:

Please don't use this as Greenfields study-start from scratch