RECORD OF MEETING

Subject:

San Mateo County SLR Vulnerability Assessment July Stakeholder Meeting

Department:

Water Management

Meeting Location:

Redwood Shores Sobrato Center for Non Profits

350 Twin Dolphin Dr, Redwood City, CA 94065

Meeting Date:

July 20, 2016

Arcadis Project No.:

LA00CSCC.0000

Participants:

Technical Working Group, Policy Advisory Group, Community Task Force, Arcadis, CA CoastalConservancy, San Mateo County

Copies:

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MEETING NOTES

Welcome (Sup. Dave Pine)

1. Measure AA has passed and we're looking forward to sharing in those funds
2. Recent travel to Washington DC for federal funding contacts (USACE, FEMA)
3. OWL (virtual reality system for SLR visualization) installed at Coyote Point Recreation Area in the City of San Mateo.

Updates & Announcements (Hilary Papendick)

1. Jeff Moneda (Foster City) - Community outreach for Foster City Levee

2. Chuck Anderson (Schaaf & Wheeler) - EIR is out with options: FEMA accreditation to 2050, 2100, or adaptably to 2050.
3. Brian McMinn (So SF) - Oyster Point and harbor updates/modifications.
4. Jill Ekas (HMB) - Did a local SLR study and have a drafted public policy document including vulnerability reduction and adaptation options. Rerouting coastal trail. Restoring bridge (and realigning).
5. Kamal Fallaha (East Palo Alto) - SAFER Bay project - levee upgrades and San Francisquito Creek project(s) to protect communities from EPA to RWC, east of Hwy 101. See San Francisquito Creek JPA for details.
6. John Fuller (Daly City) - Landfill at the coast with seawall that's been reviewed by recent study addressing wave impacts with 2 feet of SLR. (Mussel Rock)
7. Kathy Zammit (City of SM) - Resiliency and adaptation for levee systems targeting 2030-2050 SLR projections. Looking at 2100 for water treatment.
8. Warner Chabot (SFEI) - Surveys from BCDC to local governments. Released study of all shoreline structures around Bay. Aiming to have design competition for resiliency in 2017 (Resiliency by Design).
9. Christina Conklin (HMB Artist) - Community organization with informational walks to teach the community about SLR vulnerability.
10. John Keener (Pacifica City Councilmember) - Cal Nat Res Agency gave the San Francisco Littoral Cell grant of $200K to look at environmental reviews of sand placement and other beach preservation options in the Cell.
11. Ann Draper (League of Women Voters (SMCo)) - One of their top education priorities for 2016/17 is SLR and they are seeking speakers for this program.

San Mateo County Water Pollution Prevention (Matt Fabry, C/CAG)

1. City/County Assoc. of Gov'ts (C/CAG) is a JPA of 21 county organizations that deals with stormwater pollution and congestion in the county.
2. Urbanization leads to more untreated runoff - both of which are bad adjectives
3. Focus on "green infrastructure" - distributed, small-scale systems to change the general landscape of the county and provide natural infiltration and groundwater recharge
4. Future and ongoing
    1. Countywide stormwater resource plan (required to get bond-funds from the State)
    2. Green infrastructure plans developed in/by all cities
5. City of Millbrae - shallow groundwater system study (with history of high subsidence)
    1. Ongoing study on conditions for infiltration and groundwater recharge
    2. Where conditions are favorable, they try to recharge groundwater, but often they filter, then use an under-drain to connect to main storm drain system

Overview (Hilary Papendick)

1. From June 2015 start: Kickoff, data collection, SLR maps and scenarios, inventory of assets in hazard areas
2. From Dec 2015 TWG meeting: Data revisions, AVPs, Adaptation charrette

3. Q: Are there business/residential building counts?
    1. A: Not buildings, but yes parcels - counts will be available in the revised inventories in the final report.

AVPs (Jessica Ludy)

1. Asset Vulnerability Profiles (AVPs) focus on a single asset and look at its vulnerability in more detail
    1. Constituents: Exposure, Sensitivity, Adaptive Capacity
    2. Notes on potential consequences to draw attention
    3. Notes cross-cutting issues for complex impacts
    4. Notes on regulatory oversight which may affect asset and its options
    5. Notes on potential asset adaptation options (does not address feasibility)
2. Overarching Observations and Insights
    1. Types of vulnerability in the county
    2. Range and magnitude of potential impacts
    3. Cross section of stakeholders, their interests, and impacts on them
3. The Approach/Method
    1. Selection
        1. Geographic coverage
        2. Ownership/management representation
        3. Service area
        4. Data availability
        5. Asset manager support
    2. Process
        1. Questionnaires to managers (J100 methodology and lessons learned from storm damage on the east coast)
        2. Interviews and site visits with managers
        3. Comments and Revisions (review by asset managers)
4. Walkthrough of an AVP (see Reader Guide)
5. Example AVPs
    1. SSF/SB WQCP (introduction by Brian McMinn)
        1. Q: EPA fines are a noted consequence, but are other fines and lawsuits addressed? No, this is not quantified.
    2. California Coastal Trail
6. What are we learning?
    1. Many assets are already exposed
    2. Most assets are extremely sensitive (not built to flood)
    3. "Human Services" assets generally are required to have emergency plans, so they tend to have higher adaptive capacity
    4. Consequences affect infrastructure, habitat, public health, economy, & society
    5. There are several important cascading impacts with a broad reach in the county
    6. Shared or adjacent ownership and management mean adaptation requires buy-in from many different individuals/groups

7. Disproportionate impacts on some populations in the community
8. Findings are applicable to similar assets across the county
9. Adaptation ideas can be integrated into higher-detail planning & feasibility studies going forward.

7. Questions
    1. What are the "worst case" conditions on an AVP? High exposure, high sensitivity, low adaptive capacity.
    2. Are we addressing use/policy decisions that do not address these vulnerabilities (i.e. new development/use in flood-prone areas or areas that depend on flood-prone infrastructure)? This is a "what-next" kind of question, and that will be in the final report, at least at a high level.
    3. Are you showing a subset of things you've analyzed? No, we're showing the 30 we analyzed, which are a representative sample, not a set of highest-priority assets.
    4. Are you planning to set up a vulnerability matrix to prioritize these? No, these are too different to be prioritized with the information at hand. It may be possible for the county to prioritize in a later phase.
    5. In the report, will there be a description of methodology and the studies that fed this one (i.e. AECOM OT and Littoral Cell erosion)

Adaptation Planning and Assessment - Next Steps (Hilary Papendick)

1. Draft Report will be released, then a stakeholder meeting will be held for input
2. Final Report released with workshops and City Council presentations, along with stakeholder meetings on next steps
    1. This represents the transition from assessment to planning
3. Adaptation Planning Charrette (occurred in mid-July) - used to brainstorm adaptation ideas and possibilities
4. Look Ahead – San Mateo County (the OWLIZED VR project) has begun construction.
    1. There will be two OWL viewers at Coyote Point Park for 5 months, starting August 4.
    2. This shows 2 SLR cases and 2 potential adaptation strategies (in addition to FWOA).
5. Draft Next Steps for the County
    1. South Coast Vulnerability Assessment
    2. Develop GIS Viewer
    3. Support future efforts by cities and other entities (extending work done at a county level to the city level)
    4. Planning - resilience plan framework (Regionally-Integrated Climate Action Plans, RICAPs), menu of adaptation options, toolkit and sample policies
    5. Feasibility - pilot projects, C/B analyses, funding strategies
    6. Outreach & Engagement - expand YESS, expand OWL, other public outreach
6. Questions
    1. How soon do you expect to have guidelines for Climate Action Plans? Aim is to do this in Fall 2016.

2. City of Millbrae would like to start a Citizen Committee on Infrastructure and would like ideas and input about this from other places in the county where this has been done.
3. Could you give details on the Charrette? Brainstorming session for city/county staff at Mirada Rd (county) and East Palo Alto (City of)
4. OWL App? County has acquired funding and will begin work on this in Fall 2016
5. For school outreach, have you connected with the Marine Sciences Institute? No, but we'd like to do so.
6. Could the OWL app be modified over time to show new information? No, the app will be developed with existing data, and the team would have to be hired again to make modifications for new data.
7. Could the OWL app incorporate erosion projections on the coast side? Yes, this could be included. County can decide what data feeds these visualizations.

Breakout Sessions (Full Team)

Table 1: Coast

1. Coastal Trail
2. SAM Plant
   a. Improve Kehoe water carse ("the ditch") next door
   b. Saltwater Intrusion
   c. Storage facility for affluent in emergency
   d. Similar vulnerabilities between assets – How can we collaborate on strategies (Like beach nourishment)?
   e. Stormwater/green infrastructure as beneficial reuse
3. Surfer's Beach
   a. Princeton Plan is N. of Beach
   b. Discussion of Army Corps Study and uncertainty over what can happen with Jetty-Beach nourishment found as preferred alternative (but money was a barrier)
      i. Harbor District proposal to boating and waterways for nourishment (would help Mirada Rd.)
         1. $200,000 planning and $800,000 implementation
      ii. Include Army Corp in SMC VA
         1. Links on Harbor District website
      iii. Removal of Jetty vs. Adapting Jetty (hole in Jetty) = less erosion
   c. Now Marine Sanctuary will allow sediment if permit
      i. Need money and this can happen
   d. Solution with pipe through Jetty
   e. *Collaborative approach needed
   f. *Would be a great pilot

4. Pacifica Beach
    a. Beach and dune as protection (along with highway)
        i. Dec. 2014, water 3in. above doorsteps
            1. This was due to combo of rain and pump station, not high tide/sea level rise
                a. It was a mechanical issues
        ii. Jan. 1983, 300 homes flooded
    b. Report says "pump station not flooded" – is this accurate?
    c. Why does map show northern end of the beach and not southern end on AVP (the creek is at the southern end)
    d. Snowy Plovers are threatened not endangered and most of habitat overtopped with high tide on a regular basis
        i. There aren't breeding plovers on beach
5. Mirada Rd.
    a. ½ mile south of Surfer's Beach
    b. Joint ownership of road
    c. Utilities under road
    d. Money to sediment, not walls
    e. Breakwater partly to blame for erosion
    f. Addressing Surfer's Beach will alleviate problem in Miramar
    g. Help expand cross-cutting vulnerabilities
6. Table 2: South Bayside
    a. Alternatives – check for evidence that functions/capacity can or cannot shift
    b. Clarify asset risk class
    c. Feasibility as a nest step – make sure clearly stated
    d. Explain "First-Significant Inundation"
    e. Make Asset Class clear (or reference)
7. Table 3: Bayside/Coast
    a. Mussel Rock
        i. *Importance of seawall (northern access most vulnerable)
        ii. Consequences of breach:
            1. Loss of landfill material
            2. Risk of landslide
            3. Need to replace with dirt to retain protective landscape action
        iii. Costs and considerations for improving/new seawall construction
            1. Materials
            2. Flexible/modular options

3. Balancing present investments with future risks

iv. East Palo Alto
   1. Vulnerability Factors:
      a. Housing Type
      b. Demographic characteristics
         i. Elderly, homeless, language
      c. Lack of trust
      d. Proximity to wetlands
   2. *Nexus for funding?
      a. General comment
      b. Opportunities for leveraging shared resources among common entities/stakeholders? (i.e. schools districts)
   3. Next Steps: "Beneficiaries Assessment"

v. Ravenswood Ponds
   1. US F&W owned
   2. Salt ponds currently
   3. Protects Hwy 84, Facebook campus
   4. On-time adequate restoration could mitigate
      a. Sediment supply factor
   5. Regional sediment management plan
      a. I.D. alternative sediment sources
   6. Prioritize restoration in viable areas
      a. Sustainable
      b. Promising for sea level rise mitigation

vi. Pacifica Nursing and Rehab
   1. Erosion: major impact
   2. Highly sensitive asset

8. Table 4: North Bayside
   a. This stakeholder group pulls together major "players" in San Mateo County, Phase II should continue to bring everyone together to create a solid plan for the area
      i. Could break into smaller stakeholder groups)
9. Table 5: Next Steps Discussion
   a. CAP-Integration of adaptation planning?
   b. Tie SMC work into existing orgs
   c. Collaboration between:
      i. Planning, Emergency, Operations, LHMP
   d. Standardization of information, assessments, approach

e. Independent review committee?
    i. Design review
f. 2-9 page guidance document for cities, elected officials
g. Clarification of which sources to use
h. Adopt sea level rise scenario guidance

Concluding Remarks (Hilary Papendick)