## ATTACHMENT H

## Proposed Amended Adaptive Management Plan with Phased Managed Retreat

The application to retain the 873 foot section of rock revetments installed under 2017 emergency permits requires (per the Coastal Commission) that the County amend Coastal Development Permit (CDP) No. 4-14-0687, which was issued in December of 2015 for the retention of the western 1,200 foot emergency rock revetments installed in 2002 and 2005. As directed by the Coastal Commission, the CDP amendment must include an amended Adaptive Management Plan (AMP) that incorporates a plan for phased managed retreat. The phased managed retreat plan outlines County actions if planned metrics are triggered indicating that the revetments have a direct adverse effect on public coastal access, beach habitats or downcoast sand supply.

The existing AMP has a current metric that triggers reassessment of the permitted 1,200 foot western revetment if a portion of the revetment is exposed for 24 nonconsecutive months. Recognizing that current beach width and historically low sand levels are a result of three years of the recent severe El Niño, a historic five year drought, and lack of sediment input to the beach, not the result of existing revetments, the amended AMP would include applicable metrics that more appropriately address beach habitats, coastal access, and sand supply. The proposed revised AMP includes continued monitoring and measurements of beach width and elevation for a minimum of ten (10) years to evaluate the potential effects of the revetments during natural sand oscillation cycles and normal climactic conditions. The proposed amended metrics would be developed to measure average available dry sandy beach to support beach habitat and beach access for the majority of the time. As such, the proposed amended AMP would contain the following plan:

AMP, Phase 1, Continue Long Term Monitoring and Beach Profile Surveys:

Continue to perform responsibilities in the existing approved AMP, which includes the following:

- Monthly revetment monitoring for a minimum of ten (10) years, extending the monitoring for 873 feet of new revetment;
- Semi-annual beach profile surveys;
- Assessment of suitability of beach to support coastal access, beach habitats and any changes to downcoast sand supply; and
- Annual reporting to CCC staff.

Amend existing AMP Maintenance Actions #8 and #9:

- Request to delete Maintenance Action #8 Trigger for Re-evaluation of the Approved Revetment – Modify re-evaluation trigger from length and time of revetment exposure to width and elevation of beach sand supply; and
- Amend Maintenance Action #9 Public Access Maintenance and Management Modify temporary beach access requirements and evaluate the potential installation of permanent beach access.

If, after long-term revetment and beach monitoring, the established metrics are triggered such that a dry sandy beach is not present the majority of the time over the minimum ten (10) year period and the revetments are shown to have a direct adverse effect on public coastal access, beach habitats, and downcoast sand supply, the County would implement phased managed retreat as follows:

AMP, Phase 2, Initial Managed Retreat: Remove Parking Lot 7 and Relocate 350 feet of Rock Revetment:

- Removal of Parking Lot 7 (57 coastal access parking spaces).
  - Restripe parking lots to re-gain the 57 parking spaces
- Relocation 20-30 feet landward of approximately 350 feet of the existing 1,200 feet of permitted revetment under CDP No. 4-14-0687 in order to protect the existing utilities, regional bike path, Highway 217, a UCSB sewage lift station, and the western flank of developed areas of the Park.
- Construction of a permanent access point (e.g., ramp or stairway) across the relocated 350 feet of revetment at the west end of Parking Lot 6 to increase ease of public coastal access.
- The restaurant, pier, and Parking Lots 1 through 6 would remain in place and be protected by existing permitted revetments.

The costs to implement Phase 2 of the revised AMP are estimated to be \$2 million. The County has commenced discussions with the utility companies and UCSB to seek contribution of future costs.

After the completion of Phase 2 and over the course of another period of long-term revetment and beach monitoring, the County would again review designated metrics related to beach conditions, and, if the designated metrics are triggered, the County would proceed with the following Phase 3 actions:

AMP, Phase 3: Second Managed Retreat: Remove Parking Lot 6 and Relocate 300 Feet of Revetment (Following Long-Term Monitoring Post-Completion of Phase 2):

- Removal of Parking Lot 6 (56 parking spaces).
- Removal of the beach access ramp/stairway installed during Phase 1.
- Relocation of approximately 6,400-feet of existing utility lines landward.
  - Existing utility lines that extend under Parking Lots 6 and 7 would be rerouted landward possibly along the regional coastal bike trail. Utility lines that extend under Parking Lot 6 and 7 include:
    - Goleta Water District 18-inch Reclaimed Water Main;
    - Goleta Sanitary District Sewer Line;
    - Southern California Gas 8-inch High Pressure Gas Line;

- County of Santa Barbara 4-inch Force Main and Domestic Water Service Lateral; and
- County of Santa Barbara Telephone Line.
- Relocation 60-70 feet landward of 300 feet (in addition to the 350 feet relocated during Phase 1) of the existing 1,200 feet of permitted revetment under CDP No. 4-14-0687.
- Construction of a permanent access point (e.g., ramp or stairway) across the new revetment to increase ease of public coastal access.
- The restaurant, pier, and Parking Lots 1 through 5 would remain in place and be protected by existing revetments.

The costs to implement Phase 3 of the revised AMP are estimated to be \$5 million, not including the estimated \$3 million in costs associated with relocation of non-County served utility lines. The County has commenced discussions with the utility companies, UCSB and CalTrans to:

- Seek contribution of future costs for protection of the relocated utility lines and Highway 217; and
- Have the cost for relocation of the utility lines paid solely by the respective companies.

## AMP, Long-Term:

Based on worst case estimates for sea level rise, implementation of long-term planning would not be expected to occur for another 30+ years. The County may begin evaluating the future of the Park in relation to the effectiveness of near-term solutions.