

EXHIBIT A

DISCUSSION

Carmel Lagoon Feasibility Study

Background:

The Carmel River Watershed is approximately 246 square miles and drains into Carmel Bay. This Watershed has very large variations in seasonal and yearly discharge rates. The lagoon is not connected to the ocean during times of low or no river flow, when ocean waves build a barrier beach (sandbar) across the mouth of the lagoon and close the lagoon's outflow channel. When river inflow is relatively low, equilibrium is reached between river and groundwater inflow, outflow through the barrier beach and evapotranspiration. When river flow increases in the fall and early winter, lagoon water levels can rise to flood stage, with the result that private properties along the northern edge of the lagoon, as well as a parking lot and restroom facility owned by State Parks, are threatened with flooding.

Since at least the early 20th century, when water in the lagoon rose to levels that threatened private property, the sandbar has been mechanically managed (breached) in order to lower the lagoon's water level to below flood stage. Since 1973 emergency sandbar management was carried out by the County of Monterey, Monterey County Water Resources Agency (MCWRA), and State Parks. On average at least one mechanical breach has occurred yearly, with as many as three or four management actions occurring in some years.

In 1992, regulatory agencies informed the County that its ongoing sandbar management did not qualify as emergency actions due to the predictability of flooding at Carmel River Lagoon. In response, the County prepared an Interim Sandbar Management Plan and Breaching Criteria and submitted it to the various regulatory agencies. The County updated the agencies in the years following; however, a concern about lack of supporting data and analysis was expressed by the agencies and sandbar management continued without permits.

Several local, state and federal agencies, together with several non-governmental organizations, have been working together since about 2000 to develop a sustainable, long-term management plan for the Lower Carmel River and Carmel Lagoon. A technical advisory committee of public agencies developed a "Study Plan for Long-Term Adaptive Management of the Carmel River State Beach and Lagoon." This Plan was released in 2007, which outlines multiple additional studies necessary to seek permits for a long-term solution to managing Carmel River. A number of projects were considered, including the following (adapted from the 2007 Study Plan):

1. Remove buildings that flood
2. Raise or otherwise flood-proof buildings that flood
3. Provide temporary / seasonal flood protection measures (e.g., sand bagging)
4. Provide variable-height Ecosystem Protective Barrier (EPB) (e.g., rubber bladder floodwall)
5. Provide mechanical control of lagoon level (e.g., additional outfalls)
6. Manage sandbar maximum elevation to keep the lagoon below flooding level by mechanically grading to lower the berm's crest in preferred locations; also, time breaching to occur when wave, climate, tide, and inflow rates are optimum
7. Manage base elevation of outflow channel by maintaining a channel over a bedrock sill, or by installing a temporary or permanent weir structure, or by maintaining a relatively long outflow channel (e.g., along Scenic Drive)
8. "No Project"

Representatives from the Carmel River Watershed Conservancy (CRWC), Homeowners for Effective Lagoon Management (HELM), and Carmel River Steelhead Association met with Congressman Sam Farr and Supervisor Dave Potter to talk about the best way to solve this ongoing flooding problem. The group agreed that a vinyl sheet wall was the best solution among the Lagoon TAC solutions and a concept Ecosystem Protective Barrier was developed. CRWC and HELM hosted community meetings and neighborhood meetings throughout 2005-2011 to discuss the various options. Support for the EPB was limited to a solution that had minimal visual impacts.

Several agencies and organizations have sought funding for studies and for individual construction projects. MCWRA has been tasked to help coordinate the various projects and agencies in the most economically and operationally efficient manner. When John Laird was appointed Secretary of the Department of Natural Resources, he assisted with the State Department of Fish and Game (now CA Fish and Wildlife) funding a feasibility study through the Wildlife Conservation Board. CRWC was awarded \$145,000 but determined that the grant contract was infeasible for them to manage and asked MCWRA to assume management of the project. MCWRA processed an RFP for professional services and selected a team led by Whitson Engineers. Concurrently, the County through its Resource Management Agency (RMA) received \$54,000 from Monterey Peninsula Water Management District as part of a larger Integrated Regional Watershed Management Planning (IRWMP) grant it received through the Department of Water Resources. RMA coordinated with MCWRA to utilize Whitson Engineers on a similar feasibility study for the Scenic Road Project.

In 2010, MCWRA submitted an application to US Army Corps of Engineers (USACE) for a permit to manage the sandbar. A Biological Opinion (BO) from National Marine Fisheries Service was expected around May 2011 to help better define a solution. In September 2011, RMA assumed a lead role for the Carmel Lagoon management. A meeting with National Marine Fisheries Service (NMFS) and USACE identified that the EPB and SRP projects are viewed as their preferred projects with a means to achieving the following objectives:

1. To improve the functions and values of the ecosystem in and around the Lagoon by allowing lagoon levels to rise and the lagoon to breach naturally (versus mechanically breaching the lagoon).
2. To improve the existing level of flood protection in the low-lying developed areas located immediately north of the Lagoon.
3. To protect public infrastructure (Scenic Road embankment, State Parks restroom, and parking facilities) from storm surge and scour resulting from a northerly-aligned channel.

As such, the EPB/Scenic projects would be considered mitigation for a jeopardy opinion (JO). These agencies informed MCWRA and County that we could avoid the JO if we withdrew that application and filed a new application for the EPB and Scenic Road Protection Structure (SPRS) projects. The County withdrew the application for long-term sandbar management, and submitted applications (to all of the permitting agencies) for approval of the EPB and SRPS projects and a 5-year Interim Sandbar Management Plan while County/MCWRA completes plans and construction of the projects.

These agencies stated that they would work with the County to issue emergency permits for 2011/12, but identified a specific timeframe (October 2012) for the County to obtain a non-emergency permit. In November 2011, the County obtained emergency permits from the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB),

California Coastal Commission (CCC), and the California Department of Fish and Wildlife (CDFW) to manage lagoon water levels and install a sand ramp for public beach access. USACE consulted with the National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS) as part of permit review.

RMA worked with USACE to develop a draft Memorandum of Understanding that would include USACE, County and NMFS as signatory agencies. This document was reviewed by NMFS and USFWS as consulting agencies to USACE. In September 2011, a draft Memorandum of Understanding (MOU) was completed for management of the Carmel River Lagoon. This MOU:

- Establishes a long-term plan to balance protection of private property with protection of federally listed species.
- Recognizes that mechanically managing the Carmel River Lagoon over the long run is not in the best interest of the County, USACE, and NMFS.
- Identifies two long-term solutions as alternatives to performing sandbar management: the Ecosystem Protective Barrier (EPB) and the Scenic Road Protection Structure (SRPS).
- Agrees to allow an Interim Sandbar Management Plan (ISMP) for temporary (5 years) management of the sandbar while we develop the EPB and Scenic projects (design, environmental review, construction).
- Establishes a target schedule to complete the projects by 2018.

Because the County has managed the sandbar only under approved emergency permits, and due to the time necessary to assess the various options, the timeframe identified in the MOU for obtaining a non-emergency permit was extended to October 2013. Staff, and our consultants, is working to try to complete environmental documents consistent with expectations of the permitting agencies. This MOU was approved by the Board of Supervisors on June 11, 2013.

Staff has submitted permit applications to USACE, CDFW, CCC and RWQCB for permits necessary for a long-term solution (EPB and SRPS) and an interim (5 years) sandbar management plan while we pursue design and construction of these projects. These applications were incomplete pending technical studies, which were completed as part of the Feasibility Study. Additional required information will be presented in environmental documents prepared for the preferred alternative.

Selection of preferred alternative projects will help establish a project description to base our analysis. A Biological Assessment (BA) required for federal permitting (USACE) will be completed and submitted to NMFS and USFWS as part of our consultation. Consultation, leading to a biological opinion (BO), takes at least 135 days from when we submit the project description.

CEQA documents are required for State permits that include RWQCB and CDFW. CCC does not require a "CEQA" document, but requires documents with technically equivalent data. These documents will be prepared concurrent with the BA based on this project description. Although no federal funding has been used to date, staff determined that we would also prepare a NEPA document in the event federal funding is used for design and/or construction.

On April 23, 2013, the Board of Supervisors approved a Professional Services Agreement with Denise Duffy & Associates to assist with environmental documents. Phase I of their Scope of Work includes developing a project description to a level needed to prepare environmental

documents and preparation of a Biological Assessment, including a Wetland Delineation. Phase II includes providing CEQA and NEPA compliances services, including an Initial Study/Environmental Assessment (IS/EA).